

## 1. NAME OF THE MEDICINAL PRODUCT

IMFINZI 50 mg/mL concentrate for solution for infusion

## 2. QUALITATIVE AND QUANTITATIVE COMPOSITION

Each mL of concentrate for solution for infusion contains 50 mg of durvalumab.

One vial of 2.4 mL of concentrate contains 120 mg of durvalumab.

One vial of 10 mL of concentrate contains 500 mg of durvalumab.

For the full list of excipients, see section 6.1.

## 3. PHARMACEUTICAL FORM

Concentrate for solution for infusion (sterile concentrate).

Imfinzi is a sterile, preservative-free, clear to opalescent, colourless to slightly yellow solution, free from visible particles.

Imfinzi is a human immunoglobulin (IgG1 $\kappa$ ) monoclonal antibody.

## 4. CLINICAL PARTICULARS

### 4.1 Therapeutic indications

#### Locally Advanced Non-small Cell Lung Cancer (NSCLC)

- IMFINZI in combination with chemotherapy as neoadjuvant treatment, followed by IMFINZI as monotherapy after surgery, is indicated for the treatment of adult patients with resectable (tumours  $\geq$  4 cm and/or node positive) NSCLC and no known epidermal growth factor receptor (EGFR) mutations or anaplastic lymphoma kinase (ALK) rearrangements.
- IMFINZI as monotherapy is indicated for the treatment of locally advanced, unresectable NSCLC whose disease has not progressed following definitive platinum-based chemoradiation therapy.
- IMFINZI, in combination with tremelimumab and platinum-based chemotherapy, is indicated for the treatment of adult patients with metastatic NSCLC with no sensitizing epidermal growth factor receptor (EGFR) mutations or anaplastic lymphoma kinase (ALK) genomic tumor aberrations.

#### Small Cell Lung Cancer (SCLC)

IMFINZI, in combination with etoposide and either carboplatin or cisplatin, is indicated for the first-line treatment of adult patients with extensive-stage small cell lung cancer (ES-SCLC).

#### Hepatocellular Carcinoma (HCC)

IMFINZI in combination with tremelimumab is indicated for the treatment of adult patients with unresectable hepatocellular carcinoma (uHCC).

#### Biliary Tract Cancer (BTC)

IMFINZI in combination with gemcitabine and cisplatin, is indicated for the treatment of adult patients with locally advanced or metastatic biliary tract cancer (BTC).

## 4.2 Posology and method of administration

Treatment must be initiated and monitored by an experience oncologist.

To ensure traceability of biotechnically manufactured medicinal treatment, it is recommended to keep record of brand name and batch number from each treatment.

### Posology

The recommended dosages for IMFINZI as a single agent and IMFINZI in combination with other therapeutic agents are presented in Table 1, 2 and 3.

IMFINZI is administered as an intravenous infusion over 60 minutes.

When IMFINZI is administered in combination with other therapeutic agents, refer to the Prescribing Information of the therapeutic agents for further information.

**Table 1. Recommended dosage of IMFINZI**

<b>Indication</b>	<b>Recommended IMFINZI dosage</b>	<b>Duration of Therapy</b>
Locally Advanced NSCLC	Patients with a body weight of 30 kg and more: 10 mg/kg every 2 weeks or 1500 mg every 4 weeks Patients with a body weight of less than 30 kg: 10 mg/kg every 2 weeks	Until disease progression, unacceptable toxicity, or a maximum of 12 months
Resectable NSCLC	1500 mg in combination with chemotherapy every 3 weeks for up to 4 cycles prior to surgery,  followed by 1500 mg monotherapy every 4 weeks for up to 12 cycles after surgery.	Until disease is deemed unresectable, recurrence, unacceptable toxicity, or a maximum of 12 cycles after surgery.
ES-SCLC	Patients with a body weight of 30 kg and more: 1500 mg in combination with chemotherapy* every 3 weeks (21 days) for 4 cycles, followed by 1500 mg every 4 weeks as a single agent  Patients with a body weight of less than 30 kg: 20 mg/kg in combination with chemotherapy* every 3 weeks (21 days) for 4 cycles, followed by 10 mg/kg every 2 weeks as a single agent	Until disease progression or unacceptable toxicity
uHCC	Patients with a body weight of $\geq$ 30 kg: <ul style="list-style-type: none"><li>• IMFINZI 1,500 mg following a single dose of</li></ul>	After Cycle 1 of combination therapy, administer IMFINZI as a single agent every 4 weeks

	<p>tremelimumab<sup>§</sup> 300 mg at Day 1 of Cycle 1;</p> <ul style="list-style-type: none"> <li>Continue IMFINZI 1,500 mg as a single agent every 4 weeks</li> </ul> <p>Patients with a body weight of &lt; 30 kg:</p> <ul style="list-style-type: none"> <li>IMFINZI 20 mg/kg following a single dose of tremelimumab<sup>§</sup> 4 mg/kg at Day 1 of Cycle 1;</li> <li>Continue IMFINZI 20 mg/kg as a single agent every 4 weeks</li> </ul>	until disease progression or unacceptable toxicity
BTC	<p>Patients with a body weight of ≥ 30 kg: 1,500 mg in combination with chemotherapy* every 3 weeks (21 days) up to 8 cycles followed by 1,500 mg every 4 weeks as a single agent</p> <p>Patients with a body weight of &lt; 30 kg: 20 mg/kg in combination with chemotherapy* every 3 weeks (21 days) up to 8 cycles followed by 20 mg/kg every 4 weeks as a single agent</p>	Until disease progression or until unacceptable toxicity

\* Administer IMFINZI prior to chemotherapy on the same day. Refer to the Prescribing Information for the agent administered in combination with IMFINZI for recommended dosage information, as appropriate.

<sup>§</sup> Administer tremelimumab prior to IMFINZI on the same day. When tremelimumab is administered in combination with IMFINZI, refer to the Prescribing Information for tremelimumab-aclt dosing information.

### IMFINZI in Combination with Tremelimumab and Platinum-Based Chemotherapy

The recommended dosage schedule and regimens for IMFINZI for the treatment of metastatic non-small cell lung cancer (NSCLC) are provided in Tables 2 and 3.

Weigh patients prior to each infusion.

Calculate the appropriate dose using Table 3 below based on the patient's weight and tumor histology.

**Table 2: Recommended Dosage Schedule**

	Week <sup>**§</sup>																								
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
<b>Cycle:</b>	1			2			3			4			5				6				7				8
IMFINZI <sup>*¶</sup>	X			X			X			X			X				X				X				X
Tremelimumab <sup>¶#</sup>	X			X			X			X							X								
Chemotherapy	X			X			X			X			X <sup>b</sup>				X <sup>b</sup>				X <sup>b</sup>				X <sup>b</sup>

\* continue IMFINZI until disease progression or intolerable toxicity.

<sup>§</sup> Note the dosing interval change from every 3 weeks to every 4 weeks starting at cycle 5.

<sup>¶</sup> intravenous infusion over 60 minutes.

<sup>#</sup> if patients receive fewer than 4 cycles of platinum-based chemotherapy, the remaining cycles of tremelimumab (up to a total of 5) should be given after the platinum-based chemotherapy phase, in combination with IMFINZI, every 4 weeks.

<sup>p</sup> optional pemetrexed therapy from week 12 until disease progression or intolerable toxicity for patients with non-squamous disease who received treatment with pemetrexed and carboplatin/cisplatin.

**Table 3: Recommended Regimen and Dosage**

Tumor Histology	Patient Weight	IMFINZI Dosage	Tremelimumab Dosage*	Platinum-based Chemotherapy Regimen*
Non-Squamous	≥30kg	1,500 mg	75 mg	<ul style="list-style-type: none"> <li>carboplatin &amp; nab-paclitaxel</li> </ul>
	<30kg	20 mg/kg	1 mg/kg	OR <ul style="list-style-type: none"> <li>carboplatin or cisplatin &amp; pemetrexed</li> </ul>
Squamous	≥30kg	1,500 mg	75 mg	<ul style="list-style-type: none"> <li>carboplatin &amp; nab-paclitaxel</li> </ul>
	<30kg	20 mg/kg	1 mg/kg	OR <ul style="list-style-type: none"> <li>carboplatin or cisplatin &amp; gemcitabine</li> </ul>

\* Refer to the Prescribing Information for dosing information.

No dose reduction for IMFINZI is recommended. In general, withhold IMFINZI for severe (Grade 3) immune-mediated adverse reactions. Permanently discontinue IMFINZI for life-threatening (Grade 4) immune-mediated adverse reactions, recurrent severe (Grade 3) immune-mediated reactions that require systemic immunosuppressive treatment, or an inability to reduce corticosteroid dose to 10 mg or less of prednisone or equivalent per day within 12 weeks of initiating corticosteroids.

Dosage modifications for IMFINZI for adverse reactions that require management different from these general guidelines are summarized in Table 4. Refer to section 4.4 for further management recommendations, monitoring and evaluation information.

**Table 4. Treatment modifications for IMFINZI or IMFINZI in combination with tremelimumab**

Adverse reactions	Severity <sup>a</sup>	IMFINZI treatment modification
Immune-mediated pneumonitis/interstitial lung disease	Grade 2	Withhold dose <sup>b</sup>
	Grade 3 or 4	Permanently discontinue
Immune-mediated hepatitis	ALT or AST > 3 - ≤5 x ULN or total bilirubin > 1.5 - ≤3 x ULN	Withhold dose <sup>b</sup>
	ALT or AST > 5 - ≤10 x ULN	Withhold durvalumab and permanently discontinue tremelimumab
	Concurrent ALT or AST > 3 x ULN and total bilirubin > 2 x ULN <sup>c</sup>	Permanently discontinue
	ALT or AST > 10 x ULN OR total bilirubin > 3 x ULN	
Immune-mediated hepatitis in HCC (or secondary tumour involvement of	ALT or AST > 2.5-≤ 5 x BLV and ≤ 20 x ULN	Withhold dose <sup>b</sup>

<b>Adverse reactions</b>	<b>Severity<sup>a</sup></b>	<b>IMFINZI treatment modification</b>
the liver with abnormal baseline values) <sup>d</sup>	ALT or AST >5-7 x BLV and ≤ 20 x ULN OR concurrent ALT or AST 2.5-5 x BLV and ≤ 20 x ULN and total bilirubin > 1.5 - < 2 x ULN <sup>c</sup>	Withhold durvalumab and permanently discontinue tremelimumab
	ALT or AST > 7 x BLV OR > 20 x ULN whichever occurs first OR bilirubin > 3 x ULN	Permanently discontinue
Immune-mediated colitis or diarrhoea	Grade 2	Withhold dose <sup>b</sup>
	Grade 3 for IMFINZI monotherapy	Withhold dose <sup>b</sup>
	Grade 3 for IMFINZI +tremelimumab	Permanently discontinue tremelimumab <sup>e</sup>
	Grade 4	Permanently discontinue
	Intestinal perforation of ANY grade	Permanently discontinue
Immune-mediated hyperthyroidism, thyroiditis	Grade 2-4	Withhold dose until clinically stable
Immune-mediated hypothyroidism	Grade 2-4	No changes
Immune-mediated adrenal insufficiency, hypophysitis/hypopituitarism	Grade 2-4	Withhold dose until clinically stable
Immune-mediated Type 1 diabetes mellitus	Grade 2-4	No changes
Immune-mediated nephritis	Grade 2 with serum creatinine > 1.5-3 x (ULN or baseline)	Withhold dose <sup>b</sup>
	Grade 3 with serum creatinine > 3 x baseline or > 3-6 x ULN; Grade 4 with serum creatinine > 6 x ULN	Permanently discontinue
Immune-mediated rash or dermatitis (including pemphigoid)	Grade 2 for > 1 week or Grade 3	Withhold dose <sup>b</sup>
	Grade 4	Permanently discontinue
Immune-mediated myocarditis	Grade 2 - 4	Permanently discontinue
Immune-mediated myositis/polymyositis/rhabdomyolysis	Grade 2 or 3	Withhold dose <sup>b,f</sup>
	Grade 4	Permanently discontinue
Infusion-related reactions	Grade 1 or 2	Interrupt or slow the rate of infusion
	Grade 3 or 4	Permanently discontinue

<b>Adverse reactions</b>	<b>Severity<sup>a</sup></b>	<b>IMFINZI treatment modification</b>
Immune-mediated myasthenia gravis	Grade 2-4	Permanently discontinue
Immune-mediated encephalitis	Grade 2-4	Permanently discontinue
Immune-mediated Guillain-Barré syndrome	Grade 2-4	Permanently discontinue
Other immune-mediated adverse reactions <sup>g</sup>	Grade 2 or 3	Withhold dose <sup>b</sup>
	Grade 4	Permanently discontinue

<sup>a</sup> Common Terminology Criteria for Adverse Events, version 4.03. ALT: alanine aminotransferase; AST: aspartate aminotransferase; ULN: upper limit of normal; BLV: baseline value.

<sup>b</sup> After withholding, IMFINZI can be resumed within 12 weeks if the adverse reactions improved to  $\leq$  Grade 1 and the corticosteroid dose has been reduced to  $\leq$ 10 mg prednisone or equivalent per day. IMFINZI should be permanently discontinued for recurrent Grade 3 adverse reactions, as applicable.

<sup>c</sup> For patients with alternative cause follow the recommendations for AST or ALT increases without concurrent bilirubin elevations.

<sup>d</sup> If AST and ALT are less than or equal to ULN at baseline in patients with liver involvement, withhold or permanently discontinue durvalumab based on recommendations for hepatitis with no liver involvement.

<sup>e</sup> Permanently discontinue tremelimumab for Grade 3; however, treatment with durvalumab can be resumed once event has resolved.

<sup>f</sup> Permanently discontinue IMFINZI if the adverse reaction does not resolve to  $\leq$  Grade 1 within 30 days or if there are signs of respiratory insufficiency

<sup>g</sup> Includes immune thrombocytopenia, pancreatitis immune-mediated arthritis, and uveitis.

For non-immune-mediated adverse reactions, consider withholding IMFINZI for Grade 2 and 3 adverse reactions until  $\leq$  Grade 1 or baseline. IMFINZI should be discontinued for Grade 4 adverse reactions (with the exception of Grade 4 laboratory abnormalities, about which the decision to discontinue should be based on accompanying clinical signs/symptoms and clinical judgment).

### Special patient populations

Based on a population pharmacokinetic analysis, no dose adjustment of IMFINZI is recommended based on patient age, body weight, gender and race (see section 5.2).

### Paediatric and adolescents

The safety and effectiveness of IMFINZI have not been established in children and adolescents aged less than 18 years. Currently available data of IMFINZI in combination with tremelimumab are described in sections 4.8, 5.1 and 5.2, but no recommendation on a posology can be made.

### Elderly ( $\geq$ 65 years)

No dose adjustment is required for elderly patients ( $\geq$  65 years of age) (see sections 5.1 and 5.2).

### Renal impairment

Based on a population pharmacokinetic analysis, no dose adjustment of IMFINZI is recommended in patients with mild or moderate renal impairment (see section 5.2).

### Hepatic impairment

Based on a population pharmacokinetic analysis, no dose adjustment of IMFINZI is recommended for patients with mild or moderate hepatic impairment. IMFINZI has not been studied in patients with severe hepatic impairment (see section 5.2).

### Method of administration

For intravenous administration.

For instructions on dilution of the medicinal product before administration, see section “6.6.

#### IMFINZI in combination with chemotherapy

For resectable NSCLC, ES-SCLC, BTC and endometrial cancer, when IMFINZI is administered in combination with chemotherapy, administer IMFINZI prior to chemotherapy on the same day.

#### IMFINZI in combination with tremelimumab and platinum-based chemotherapy

For metastatic NSCLC, during cycle 1, tremelimumab is to be followed by IMFINZI starting approximately 1 hour (maximum 2 hours) after the end of the tremelimumab infusion. Platinum-based chemotherapy infusion should start approximately 1 hour (maximum 2 hours) after the end of the IMFINZI infusion. If there are no clinically significant concerns during cycle 1, then at the physician's discretion, subsequent cycles of IMFINZI can be given immediately after tremelimumab and the time period between the end of the IMFINZI infusion and the start of chemotherapy can be reduced to 30 minutes.

#### IMFINZI in combination with tremelimumab

For uHCC, when IMFINZI is administered in combination with tremelimumab, administer tremelimumab prior to IMFINZI on the same day. IMFINZI and tremelimumab are administered as separate intravenous infusions.

### **4.3 Contraindications**

Hypersensitivity to the active substance(s) or to any of the excipients listed in section 6.1.

### **4.4 Special warnings and precautions for use**

Refer to section 4.2, Table 4 for recommended treatment modifications

For suspected immune-mediated adverse reactions, adequate evaluation should be performed to confirm etiology or exclude alternate etiologies. Based on the severity of the adverse reaction, IMFINZI or IMFINZI in combination with tremelimumab should be withheld or permanently discontinued. Treatment with corticosteroids or endocrine therapy should be initiated. For events requiring corticosteroid therapy, and upon improvement to  $\leq$  Grade 1, corticosteroid taper should be initiated and continued over at least 1 month. Consider increasing dose of corticosteroids and/or using additional systemic immunosuppressants if there is worsening or no improvement.

#### Immune-mediated pneumonitis

Immune-mediated pneumonitis or interstitial lung disease, defined as requiring use of systemic corticosteroids and with no clear alternate etiology, occurred in patients receiving IMFINZI (see section 4.8). Patients should be monitored for signs and symptoms of pneumonitis. Suspected pneumonitis should be confirmed with radiographic imaging and other infectious and disease-related aetiologies excluded, and managed as recommended in section 4.2. For Grade 2 events, an initial dose of 1 – 2 mg/kg/day prednisone or equivalent should be initiated followed by a taper. For Grade 3 or 4 events, an initial dose of 2 – 4 mg/kg/day methylprednisolone or equivalent should be initiated followed by a taper.

#### Pneumonitis and radiation pneumonitis

Radiation pneumonitis is frequently observed in patients receiving radiation therapy to the lung and the clinical presentation of pneumonitis and radiation pneumonitis is very similar. In the PACIFIC Study, in patients who had completed treatment with concurrent chemoradiation within 1 to 42 days prior to initiation of the trial, pneumonitis and radiation pneumonitis occurred in patients receiving IMFINZI. Pneumonitis or radiation pneumonitis occurred in 161 (33.9%) patients in the IMFINZI treated group and 58 (24.8%) in the placebo group; including Grade 3 in 16 (3.4%) patients on IMFINZI vs. 7 (3.0%) patients on placebo and Grade 5 in 5 (1.1%) patients on IMFINZI vs. 4 (1.7%) patients on placebo. The median time to onset in the IMFINZI-treated group was 55 days (range: 1-406 days) vs. 55 days (range: 1-255 days) in the placebo group.

### Immune-mediated hepatitis

Immune-mediated hepatitis, defined as requiring use of systemic corticosteroids and with no clear alternate etiology, occurred in patients receiving IMFINZI or IMFINZI in combination with tremelimumab (see section 4.8). Patients should be monitored for abnormal liver tests prior to and periodically during treatment with IMFINZI. Immune-mediated hepatitis should be managed as recommended in section 4.2. Corticosteroids should be administered with an initial dose of 1-2 mg/kg/day prednisone or equivalent followed by taper for all grades.

### Immune-mediated colitis

Immune-mediated colitis or diarrhoea, defined as requiring use of systemic corticosteroids and with no clear alternate etiology, occurred in patients receiving IMFINZI or IMFINZI in combination with tremelimumab (see section 4.8). Intestinal perforation and large Intestine perforation were reported in patients receiving IMFINZI in combination with tremelimumab. Patients should be monitored for signs and symptoms of colitis or diarrhoea and managed as recommended in section 4.2.

Corticosteroids should be administered at an initial dose of 1-2 mg/kg/day prednisone or equivalent followed by a taper for Grades 2-4. Consult a surgeon immediately if intestinal perforation of ANY grade is suspected.

### Immune-mediated endocrinopathies

#### *Immune-mediated hypothyroidism/hyperthyroidism/thyroiditis*

Immune-mediated hyperthyroidism, hyperthyroidism or thyroiditis have occurred in patients receiving IMFINZI or IMFINZI in combination with tremelimumab (see section 4.8). Patients should be monitored for abnormal thyroid function tests prior to and periodically during treatment and managed as recommended in section 4.2. For immune-mediated hypothyroidism, initiate thyroid hormone replacement as clinically indicated for Grades 2-4. For immune-mediated hyperthyroidism/thyroiditis, symptomatic management can be implemented for Grades 2-4.

#### *Immune-mediated adrenal insufficiency*

Immune-mediated adrenal insufficiency occurred in patients receiving IMFINZI or IMFINZI in combination with tremelimumab (see section 4.8). Patients should be monitored for clinical signs and symptoms of adrenal insufficiency. For symptomatic adrenal insufficiency, patients should be managed as recommended in section 4.2. Corticosteroids should be administered with an initial dose of 1-2 mg/kg/day prednisone or equivalent followed by taper and a hormone replacement as clinically indicated for Grades 2-4.

#### *Immune-mediated type 1 diabetes mellitus*

Immune-mediated type 1 diabetes mellitus, which can present with diabetic ketoacidosis, occurred in patients receiving IMFINZI or IMFINZI in combination with tremelimumab (see section 4.8). Patients should be monitored for clinical signs and symptoms of type 1 diabetes mellitus. For symptomatic type 1 diabetes mellitus, patients should be managed as recommended in section 4.2. Treatment with insulin can be initiated as clinically indicated for Grades 2-4.

#### *Immune-mediated hypophysitis/hypopituitarism*

Immune-mediated hypophysitis or hypopituitarism occurred in patients receiving IMFINZI or IMFINZI in combination with tremelimumab (see section 4.8). Patients should be monitored for clinical signs and symptoms of hypophysitis or hypopituitarism. For symptomatic hypophysitis or hypopituitarism, patients should be managed as recommended in section 4.2. Corticosteroids should be administered with an initial dose of 1-2 mg/kg/day prednisone or equivalent followed by taper and a hormone replacement as clinically indicated for Grades 2-4.

### Immune-mediated nephritis

Immune-mediated nephritis, defined as requiring use of systemic corticosteroids and with no clear alternate etiology, occurred in patients receiving IMFINZI or IMFINZI in combination with tremelimumab (see section 4.8). Patients should be monitored for abnormal renal function tests prior to and periodically during treatment with IMFINZI or IMFINZI in combination with tremelimumab and



managed as recommended in section 4.2. Corticosteroids should be administered with an initial dose of 1-2 mg/kg/day prednisone or equivalent followed by taper for Grades 2-4.

#### Immune-mediated rash

Immune-mediated rash or dermatitis (including pemphigoid), defined as requiring use of systemic corticosteroids and with no clear alternate etiology, occurred in patients receiving IMFINZI or IMFINZI in combination with tremelimumab (see section 4.8). Patients should be monitored for signs and symptoms of rash or dermatitis and managed as recommended in section 4.2. Corticosteroids should be administered with an initial dose of 1-2 mg/kg/day prednisone or equivalent followed by taper for Grade 2 > 1 week or Grade 3 and 4.

#### Immune-mediated myocarditis

Immune-mediated myocarditis, which can be fatal, occurred in patients receiving IMFINZI or IMFINZI in combination with tremelimumab (see section 4.8). Patients should be monitored for signs and symptoms of immune-mediated myocarditis and managed as recommended in section 4.2. Corticosteroids should be administered with an initial dose of 2-4 mg/kg/day prednisone or equivalent followed by taper for Grades 2-4. If no improvement within 2 to 3 days despite corticosteroids, promptly start additional immunosuppressive therapy. Upon resolution (Grade 0), corticosteroid taper should be initiated and continued over at least 1 month.

#### Other immune-mediated adverse reactions

Given the mechanism of action of IMFINZI or IMFINZI in combination with tremelimumab, other potential immune-mediated adverse reactions may occur. Patients should be monitored for signs and symptoms and managed as recommended in section 4.2. Other immune mediated adverse reaction are myasthenia gravis, myositis, polymyositis, rhabdomyolysis, Guillain-Barré syndrome, immune thrombocytopenia, pancreatitis, immune-mediated arthritis, uveitis and encephalitis (see section 4.8). Corticosteroids should be administered with an initial dose of 1-2 mg/kg/day prednisone or equivalent followed by taper for Grades 2-4.

#### Infusion related reactions

Patients should be monitored for signs and symptoms of infusion related reactions. Severe infusion related reactions have been reported in patients receiving IMFINZI or IMFINZI in combination with tremelimumab (see section 4.8). For Grade 1 or 2 severity, may consider pre-medications for prophylaxis of subsequent infusion reactions. For Grade 3 or 4, manage severe infusion-related reactions per insititutional standard, appropriate clinical practice guidelines and/or society guidelines.

#### Adverse reactions in transplant recipients

In patients treated with PD-1 / PD-L1 inhibitors, solid organ transplant rejection has been observed in the postmarketing setting. In these patients, the benefit of treatment with PD-1/PD-L1 inhibitors including Durvalumab should be weighed against the risk of possible organ rejection.

### **4.5 Interaction with other medicinal products and other forms of interaction**

Durvalumab is an immunoglobulin, therefore no formal pharmacokinetic drug-drug interaction studies have been conducted with durvalumab. PK drug-drug interaction of durvalumab with other medicinal products are not anticipated given durvalumab is not primarily cleared via hepatic/renal pathways but instead the primary elimination pathways are protein catabolism via reticuloendothelial system or target-mediated disposition. Durvalumab is not expected to induce or inhibit the major drug metabolizing cytochrome P450 pathways.

The pharmacokinetics of durvalumab is similar when assessed as a single agent and when in combination with chemotherapy.

The use of systemic corticosteroids or immunosuppressants before starting durvalumab should be avoided because of their potential interference with the pharmacodynamic activity and efficacy of

durvalumab. However, systemic corticosteroids or other immunosuppressants can be used after starting durvalumab to treat immune-related adverse reactions (see section 4.4).

PK drug-drug interaction between durvalumab and chemotherapy was assessed in the CASPIAN study and no clinically meaningful PK drug-drug interaction was identified. PK drug-drug interaction between durvalumab in combination with tremelimumab and platinum-based chemotherapy was assessed in the POSEIDON study and no clinically meaningful PK drug-drug interaction was identified. PK drug-drug interaction between durvalumab in combination with tremelimumab was assessed in the HIMALAYA study and no clinically meaningful PK drug-drug interaction was identified.

## 4.6 Pregnancy and lactation

### Pregnancy

In animal reproduction studies, administration of durvalumab to pregnant cynomolgus monkeys from the confirmation of pregnancy through delivery at exposure levels approximately 6-20 times higher than those observed at the clinical dose of 10 mg/kg of durvalumab (based on AUC) was associated with premature delivery, fetal loss (abortion and stillbirth) and an increase in neonatal deaths compared to concurrent control (see section 5.3).

There are no data on the use of durvalumab in pregnant women. Based on its mechanism of action, durvalumab has the potential to impact maintenance of pregnancy and may cause fetal harm when administered to a pregnant woman. Human IgG1 is known to cross the placental barrier. Imfinzi cannot be used during pregnancy, unless this is absolutely required. Women of childbearing potential should use effective contraception during treatment with IMFINZI and for at least 3 months after the last dose.

### Breast-feeding

There is no information regarding the presence of durvalumab in human milk, the absorption and effects on the breastfed infant, or the effects on milk production. Human IgG is excreted in human milk. In animal reproduction studies, administration of durvalumab to pregnant cynomolgus monkeys was associated with dose-related low level excretion of durvalumab in breast milk. Because of the potential for adverse reactions in breastfed infants from durvalumab, advise a lactating woman not to breastfeed during treatment and for at least 3 months after the last dose.

## 4.7 Effects on ability to drive and use machines

Based on its pharmacodynamic properties, durvalumab is unlikely to affect the ability to drive and use machines. However, if patients experience adverse reactions affecting their ability to concentrate and react, they should be advised to use caution when driving or operating machinery.

## 4.8 Undesirable effects

### Overall summary of adverse drug reactions

The safety of IMFINZI as monotherapy is based on pooled data in 3006 patients from 9 studies across multiple tumor types.

The most frequent adverse reactions were cough (21.5%), diarrhoea (16.3%) and rash (16.0%).

### Tabulated list of adverse reactions

Table 5 lists the incidence of adverse reactions in the monotherapy safety dataset. Adverse drug reactions are listed according to system organ class in MedDRA. Within each system organ class, the adverse drug reactions are presented in decreasing frequency. Within each frequency grouping, adverse drug reactions are presented in order of decreasing seriousness. In addition, the corresponding

frequency category for each ADR is based on the CIOMS III convention and is defined as: very common ( $\geq 1/10$ ); common ( $\geq 1/100$  to  $< 1/10$ ); uncommon ( $\geq 1/1,000$  to  $< 1/100$ ); rare ( $\geq 1/10,000$  to  $< 1/1,000$ ); very rare ( $< 1/10,000$ ); not determined (cannot be estimated from available data).

**Table 5. Adverse drug reactions in patients treated with IMFINZI monotherapy**

System Organ Class	Adverse Drug Reaction	Frequency of any Grade		Frequency of Grade 3-4	
Respiratory, thoracic and mediastinal disorders	Cough/Productive Cough	Very common	646 (21.5%)	Uncommon	11 (0.4%)
	Pneumonitis <sup>a</sup>	Common	114 (3.8%)	Uncommon	26 (0.9%)
	Dysphonia	Common	93 (3.1%)	Rare	2 (<0.1%)
	Interstitial lung disease	Uncommon	18 (0.6%)	Uncommon	4 (0.1%)
Hepatobiliary disorders	Aspartate aminotransferase increased or Alanine aminotransferase increased <sup>a,b</sup>	Common	244 (8.1%)	Common	69 (2.3%)
	Hepatitis <sup>a,c</sup>	Uncommon	25 (0.8%)	Uncommon	12 (0.4%)
Gastrointestinal disorders	Abdominal pain <sup>d</sup>	Very common	383 (12.7%)	Common	53 (1.8%)
	Diarrhoea	Very common	491 (16.3%)	Uncommon	19 (0.6%)
	Colitis <sup>e</sup>	Uncommon	28 (0.9%)	Uncommon	10 (0.3%)
	Pancreatitis <sup>f</sup>	Uncommon	6 (0.2%)	Uncommon	5 (0.17%)
Endocrine disorders	Hypothyroidism <sup>g</sup>	Very common	305 (10.1%)	Uncommon	5 (0.2%)
	Hyperthyroidism <sup>h</sup>	Common	137 (4.6%)		0
	Thyroiditis <sup>i</sup>	Uncommon	23 (0.8%)	Rare	2 (<0.1%)
	Adrenal insufficiency	Uncommon	18 (0.6%)	Rare	3 (<0.1%)
	Hypophysitis/Hypopituitarism	Rare	2 (<0.1%)	Rare	2 (<0.1%)
	Type 1 diabetes mellitus	Rare	1 (<0.1%)	Rare	1 (<0.1%)
	Diabetes insipidus	Rare	1 (<0.1%)	Rare	1 (<0.1%)
Eye disorders	Uveitis	Rare	1 (<0.1%)		0
Renal and urinary disorders	Blood creatinine increased	Common	105 (3.5%)	Rare	3 (<0.1%)
	Dysuria	Common	39 (1.3%)		0
	Nephritis <sup>j</sup>	Uncommon	9 (0.3%)	Rare	2 (<0.1%)
Skin and subcutaneous tissue disorders	Rash <sup>k</sup>	Very common	480 (16.0%)	Uncommon	18 (0.6%)
	Pruritus <sup>l</sup>	Very common	325 (10.8%)	Rare	1 (<0.1%)
	Night sweats	Common	47 (1.6%)	Rare	1 (<0.1%)
	Dermatitis	Uncommon	22 (0.7%)	Rare	2 (<0.1%)
	Pemphigoid <sup>m</sup>	Rare	3 (<0.1%)		0
Cardiac disorders	Myocarditis	Rare	1 (<0.1%)	Rare	1 (<0.1%)

System Organ Class	Adverse Drug Reaction	Frequency of any Grade		Frequency of Grade 3-4	
General disorders and administration site conditions	Pyrexia	Very common	414 (13.8%)	Uncommon	10 (0.3%)
	Oedema peripheral <sup>n</sup>	Common	291 (9.7%)	Uncommon	9 (0.3%)
Infections and infestations	Upper respiratory tract infections <sup>o</sup>	Very common	407 (13.5%)	Uncommon	6 (0.2%)
	Pneumonia <sup>a,p</sup>	Common	269 (8.9%)	Common	106 (3.5%)
	Oral candidiasis	Common	64 (2.1%)		0
	Dental and oral soft tissue infections <sup>q</sup>	Common	50 (1.7%)	Rare	1 (<0.1%)
	Influenza	Common	47 (1.6%)	Rare	2 (<0.1%)
Musculoskeletal and connective tissue disorders	Myalgia	Common	178 (5.9%)	Rare	2 (<0.1%)
	Myositis <sup>t</sup>	Uncommon	6 (0.2%)	Rare	1 (<0.1%)
	Polymyositis <sup>r</sup>	Not determined <sup>s</sup>		Not determined <sup>s</sup>	
	Immune-mediated arthritis	Not determined <sup>t</sup>		Not determined <sup>t</sup>	
Nervous system disorders	Myasthenia gravis	Not determined <sup>t</sup>		Not determined <sup>t</sup>	
	Encephalitis	Not determined <sup>u</sup>		Not determined <sup>u</sup>	
	Guillain-Barré syndrome <sup>a</sup>	Not determined <sup>t</sup>		Not determined <sup>t</sup>	
Blood and lymphatic system disorders	Immune thrombocytopenia <sup>a</sup>	Rare	2 (<0.1%)	Rare	1 (<0.1%)
Injury, poisoning and procedural complications	Infusion-related reaction <sup>v</sup>	Common	49 (1.6%)	Uncommon	5 (0.2%)

<sup>a</sup> Including fatal outcome.

<sup>b</sup> Includes alanine aminotransferase increased, aspartate aminotransferase increased, hepatic enzyme increased, and transaminases increased.

<sup>c</sup> Includes hepatitis, autoimmune hepatitis, hepatitis toxic, hepatocellular injury, hepatitis acute, hepatotoxicity and immune-mediated hepatitis.

<sup>d</sup> Includes abdominal pain, abdominal pain lower, abdominal pain upper, and flank pain.

<sup>e</sup> Includes colitis, enteritis, enterocolitis, and proctitis.

<sup>f</sup> Includes pancreatitis and pancreatitis acute.

<sup>g</sup> Includes autoimmune hypothyroidism and hypothyroidism.

<sup>h</sup> Includes hyperthyroidism and Basedow's disease.

<sup>i</sup> Includes autoimmune thyroiditis, thyroiditis, and thyroiditis subacute.

<sup>j</sup> Includes autoimmune nephritis, tubulointerstitial nephritis, nephritis, glomerulonephritis and glomerulonephritis membranous.

<sup>k</sup> Includes rash erythematous, rash generalized, rash macular, rash maculopapular, rash papular, rash pruritic, rash pustular, erythema, eczema and rash.

<sup>l</sup> Includes pruritus generalized and pruritus.

<sup>m</sup> Includes pemphigoid, dermatitis bullous and pemphigus. Reported frequency from completed and ongoing trials is uncommon.

<sup>n</sup> Includes oedema peripheral and peripheral swelling.

<sup>o</sup> Includes laryngitis, nasopharyngitis, peritonsillar abscess, pharyngitis, rhinitis, sinusitis, tonsillitis, tracheobronchitis, and upper respiratory tract infection.

<sup>p</sup> Includes lung infection, pneumocystis jirovecii pneumonia, pneumonia, candida pneumonia, pneumonia legionella, pneumonia adenoviral, pneumonia bacterial, pneumonia cytomegaloviral, pneumonia haemophilus, pneumonia pneumococcal and pneumonia streptococcal.

<sup>q</sup> Includes gingivitis, oral infection, periodontitis, pulpitis dental, tooth abscess and tooth infection.

<sup>r</sup> Includes rhabdomyolysis (as single medical concept with myositis/polymyositis)

- <sup>s</sup> Polymyositis (fatal) was observed in a patient treated with IMFINZI from an ongoing sponsored clinical study outside of the pooled dataset: rare in any grade, rare in Grade 3 or 4 or 5.
- <sup>t</sup> Reported frequency from AstraZeneca-sponsored clinical studies outside of the pooled dataset is rare, with no events at Grade > 2.
- <sup>u</sup> Reported frequency from ongoing AstraZeneca-sponsored clinical studies outside of the pooled dataset is rare and includes two events of encephalitis, one was Grade 5 (fatal) and one was Grade 2.
- <sup>v</sup> Includes infusion-related reaction and urticaria with onset on the day of dosing or 1 day after dosing

Table 6 lists the incidence of laboratory abnormalities reported in the IMFINZI monotherapy safety dataset.

**Table 6. Laboratory abnormalities worsening from baseline in patients treated with IMFINZI monotherapy**

Laboratory Abnormalities	n	Any Grade	Grade 3 or 4
Alanine aminotransferase increased	2866	813 (28.4%)	69 (2.4%)
Aspartate aminotransferase increased	2858	891 (31.2%)	102 (3.6%)
Blood creatinine increased	2804	642 (22.9%)	13 (0.5%)
TSH elevated > ULN and ≤ ULN at baseline	3006	566 (18.8%)	NA
TSH decreased < LLN and ≥ LLN at baseline	3006	545 (18.1%)	NA

ULN = upper limit of normal; LLN = lower limit of normal

The safety of IMFINZI in combination with chemotherapy is based on data in 265 patients from the CASPIAN (SCLC) study and was consistent with IMFINZI monotherapy and known chemotherapy safety profile.

The safety of IMFINZI in combination with chemotherapy as neoadjuvant treatment, is based on data in 401 patients from the AEGEAN (resectable NSCLC) study and was consistent with known IMFINZI monotherapy and known chemotherapy safety profiles.

The safety of IMFINZI in combination with chemotherapy is based on data in 338 patients from the TOPAZ-1 (BTC) study and was consistent with IMFINZI monotherapy and known chemotherapy safety profiles.

The safety of IMFINZI in combination with tremelimumab and platinum-based chemotherapy is based on data in 330 patients from the POSEIDON (metastatic NSCLC) study and was consistent with known IMFINZI + tremelimumab and known chemotherapy safety profiles.

The safety of STRIDE is based on data in 462 patients from the HCC pool (uHCC) and was consistent with known IMFINZI + tremelimumab safety profile.

#### Description of selected adverse reactions

The data below reflect information for significant adverse reactions for IMFINZI as monotherapy in the pooled safety dataset across tumor types (n=3006). IMFINZI in combination with tremelimumab (75 mg Q4W; pan-tumour pool) in the pooled safety dataset across tumour types (n=2280) and STRIDE in the HCC pool (n=462).

The management guidelines for these adverse reactions are described in sections 4.2 and 4.4.

#### *Immune-mediated pneumonitis*

In patients receiving IMFINZI monotherapy, immune-mediated pneumonitis occurred in 92 (3.1%) patients, including Grade 3 in 25 (0.8%) patients, Grade 4 in 2 (< 0.1%) patients, and Grade 5 in 6 (0.2%) patients. The median time to onset was 55 days (range: 2-785 days). Sixty-nine of the 92 patients received high-dose corticosteroid treatment (at least 40 mg prednisone or equivalent per day), 2 patients also received infliximab and 1 patient also received cyclosporine. IMFINZI was discontinued in 38 patients. Resolution occurred in 53 patients. Immune-mediated pneumonitis occurred more frequently in patients in the PACIFIC Study who had completed treatment with concurrent chemoradiation within 1 to 42 days prior to initiation of the study (9.9%), compared to the other patients in the combined safety database (1.8%).

In the PACIFIC Study, in patients with locally advanced, unresectable NSCLC (n=475 in the IMFINZI arm, and n=234 in the placebo arm) who had completed treatment with concurrent chemoradiation within 1 to 42 days prior to initiation of the study, immune-mediated pneumonitis occurred in 47 (9.9%) patients in the IMFINZI-treated group and 14 (6.0%) patients in the placebo group, including Grade 3 in 9 (1.9%) patients on IMFINZI vs. 6 (2.6%) patients on placebo and Grade 5 in 4 (0.8%) patients on IMFINZI vs. 3 (1.3%) patients on placebo. The median time to onset in the IMFINZI-treated group was 46 days (range: 2-342 days) vs. 57 days (range: 26-253 days) in the placebo group. In the IMFINZI-treated group, 30 patients who received high-dose corticosteroid treatment (at least 40 mg prednisone or equivalent per day), and 2 patients also received infliximab. In the placebo group 12 patients received high-dose corticosteroid treatment (at least 40 mg prednisone or equivalent per day) and 1 patient also received cyclophosphamide and tacrolimus. Resolution occurred for 29 patients in the IMFINZI treated group vs 6 in placebo.

#### *IMFINZI + tremelimumab pan-tumour pool*

In patients receiving IMFINZI in combination with tremelimumab, immune-mediated pneumonitis occurred in 86 (3.8%) patients, including Grade 3 in 30 (1.3%) patients, Grade 4 in 1 (<0.1%) patient, and Grade 5 in 7 (0.3%) patients. The median time to onset was 57 days (range: 8-912 days). All patients received systemic corticosteroids, and 79 of the 86 patients received high-dose corticosteroid treatment (at least 40 mg prednisone or equivalent per day). Seven patients also received other immunosuppressants. Treatment was discontinued in 39 patients. Resolution occurred in 51 patients.

#### *HCC pool*

In patients receiving STRIDE, immune-mediated pneumonitis occurred in 6 (1.3%) patients, including Grade 3 in 1 (0.2%) patient and Grade 5 (fatal) in 1 (0.2%) patient. The median time to onset was 29 days (range: 5-774 days). Six patients received systemic corticosteroids, and 5 of the 6 patients received high-dose corticosteroid treatment (at least 40 mg prednisone or equivalent per day). One patient also received other immunosuppressants. Treatment was discontinued in 2 patients. Resolution occurred in 3 patients.

#### *Immune-mediated hepatitis*

In patients receiving IMFINZI monotherapy, immune-mediated hepatitis occurred in 67(2.2%) patients, including Grade 3 in 35 (1.2%) patients, Grade 4 in 6 (0.2%) and Grade 5 in 4 ( 0.1%) patients. The median time to onset was 36 days (range: 3-333 days). Forty-four of the 67 patients received high-dose corticosteroid treatment (at least 40 mg prednisone or equivalent per day). Three patients also received mycophenolate treatment. IMFINZI was discontinued in 9 patients. Resolution occurred in 29 patients.

#### *IMFINZI + tremelimumab pan-tumour pool*

In patients receiving IMFINZI in combination with tremelimumab, immune-mediated hepatitis occurred in 80 (3.5%) patients, including Grade 3 in 48 (2.1%) patients, Grade 4 in 8 (0.4%) patients, and Grade 5 in 2 (<0.1%) patients. The median time to onset was 36 days (range: 1-533 days). All patients received systemic corticosteroids, and 68 of the 80 patients received high-dose corticosteroid treatment (at least 40 mg prednisone or equivalent per day). Eight patients also received other immunosuppressants. Treatment was discontinued in 27 patients. Resolution occurred in 47 patients.

#### *HCC pool*

In patients receiving STRIDE, immune-mediated hepatitis occurred in 34 (7.4%) patients, including Grade 3 in 20 (4.3%) patients, Grade 4 in 1 (0.2%) patient and Grade 5 (fatal) in 3 (0.6%) patients. The median time to onset was 29 days (range: 13-313 days). All patients received systemic corticosteroids, and 32 of the 34 patients received high-dose corticosteroid treatment (at least 40 mg prednisone or equivalent per day). Nine patients also received other immunosuppressants. Treatment was discontinued in 10 patients. Resolution occurred in 13 patients.

#### Immune-mediated colitis

IMFINZI monotherapy, immune-mediated colitis or diarrhea occurred in 58 (1.9%) patients, including Grade 3 in 9 (0.3%) patients and Grade 4 in 2 (<0.1%) patient. The median time to onset was 70 days (range: 1-394 days). Thirty-eight of the 58 patients received high-dose corticosteroid treatment (at least 40 mg prednisone or equivalent per day). One patient also received infliximab treatment and one patient also received mycophenolate treatment. IMFINZI was discontinued in 9 patients. Resolution occurred in 43 patients.

#### *IMFINZI + tremelimumab pan-tumour pool*

In patients receiving IMFINZI in combination with tremelimumab, immune-mediated colitis or diarrhoea occurred in 167 (7.3%) patients, including Grade 3 in 76 (3.3%) patients and Grade 4 in 3 (0.1%) patients. The median time to onset was 57 days (range: 3-906 days). All patients received systemic corticosteroids, and 151 of the 167 patients received high-dose corticosteroid treatment (at least 40 mg prednisone or equivalent per day). Twenty-two patients also received other immunosuppressants. Treatment was discontinued in 54 patients. Resolution occurred in 141 patients.

Intestinal perforation was observed in patients receiving IMFINZI in combination with tremelimumab.

#### *HCC pool*

In patients receiving STRIDE, immune-mediated colitis or diarrhoea occurred in 31 (6.7%) patients, including Grade 3 in 17 (3.7%) patients. The median time to onset was 23 days (range: 2-479 days). All patients received systemic corticosteroids, and 28 of the 31 patients received high-dose corticosteroid treatment (at least 40 mg prednisone or equivalent per day). Four patients also received other immunosuppressants. Treatment was discontinued in 5 patients. Resolution occurred in 29 patients. Intestinal perforation was not observed in patients receiving STRIDE.

#### Immune-mediated endocrinopathies

##### Immune-mediated hypothyroidism

In patients receiving IMFINZI monotherapy, immune-mediated hypothyroidism occurred in 245 (8.2%) patients, including Grade 3 in 4 (0.1%) patients. The median time to onset was 85 days (range: 1-562 days). Of the 245 patients, 240 patients received hormone replacement therapy, 6 patients received high-dose corticosteroids (at least 40 mg prednisone or equivalent per day) for immune-mediated hypothyroidism followed by hormone replacement. No patients discontinued IMFINZI due to immune-mediated hypothyroidism. Immune-mediated hypothyroidism was preceded by immune-mediated hyperthyroidism in 20 patients or immune-mediated thyroiditis in 3 patients.

#### *IMFINZI + tremelimumab pan-tumour pool*

In patients receiving IMFINZI in combination with tremelimumab, immune-mediated hypothyroidism occurred in 209 (9.2%) patients, including Grade 3 in 6 (0.3%) patients. The median time to onset was 85 days (range: 1-624 days). Thirteen patients received systemic corticosteroids, and 8 of the 13 patients received high-dose corticosteroid treatment (at least 40 mg prednisone or equivalent per day). Two-hundred and five patients required endocrine therapy. Treatment was discontinued in 3 patients. Resolution occurred in 52 patients. Immune-mediated hypothyroidism was preceded by immune-mediated hyperthyroidism in 25 patients or immune-mediated thyroiditis in 2 patients.

#### *HCC pool*

In patients receiving STRIDE, immune-mediated hypothyroidism occurred in 46 (10.0%) patients. The median time to onset was 85 days (range: 26-763 days). One patient received high-dose corticosteroid treatment (at least 40 mg prednisone or equivalent per day). All patients required other therapy

(thiamazole, carbimazole, propylthiouracil, perchlorate, calcium channel blocker, or beta-blocker). Resolution occurred in 6 patients. Immunemediated hypothyroidism was preceded by immune-mediated hyperthyroidism in 4 patients.

#### Immune-mediated hyperthyroidism

In patients receiving IMFINZI monotherapy, immune-mediated hyperthyroidism occurred in 50 (1.7%) patients, there were no Grade 3 or 4 cases. The median time to onset was 43 days (range: 1-253 days). Forty-six of the 50 patients received medical therapy (thiamazole, carbimazole, propylthiouracil, perchlorate, calcium channel blocker or beta-blocker), 11 patients received systemic corticosteroids and 4 of the 11 patients received high-dose systemic corticosteroid treatment (at least 40 mg prednisone or equivalent per day). One patient discontinued IMFINZI due to immune-mediated hyperthyroidism. Resolution occurred in 39 patients.

#### *IMFINZI + tremelimumab pan-tumour pool*

In patients receiving IMFINZI in combination with tremelimumab, immune-mediated hyperthyroidism occurred in 62 (2.7%) patients, including Grade 3 in 5 (0.2%) patients. The median time to onset was 33 days (range: 4-176 days). Eighteen patients received systemic corticosteroids, and 11 of the 18 patients received high-dose corticosteroid treatment (at least 40 mg prednisone or equivalent per day). Fifty-three patients required other therapy (thiamazole, carbimazole, propylthiouracil, perchlorate, calcium channel blocker, or betablocker). Treatment was discontinued in 1 patient. Resolution occurred in 47 patients.

#### *HCC pool*

In patients receiving STRIDE, immune-mediated hyperthyroidism occurred in 21 (4.5%) patients, including Grade 3 in 1 (0.2%) patient. The median time to onset was 30 days (range: 13-60 days). Four patients received systemic corticosteroids, and all of the four patients received high-dose corticosteroid treatment (at least 40 mg prednisone or equivalent per day). Twenty patients required other therapy (thiamazole, carbimazole, propylthiouracil, perchlorate, calcium channel blocker, or beta-blocker). One patient discontinued treatment due to hyperthyroidism. Resolution occurred in 17 patients.

#### Immune-mediated thyroiditis

In patients receiving IMFINZI monotherapy, immune-mediated thyroiditis occurred in 12 (0.4%) patients, including Grade 3 in 2 (<0.1%) patients. The median time to onset was 49 days (range: 14-106 days). Of the 12 patients, 10 patients received hormone replacement therapy, 1 patient received high-dose corticosteroids (at least 40 mg prednisone or equivalent per day). One patient discontinued IMFINZI due to immune-mediated thyroiditis

#### *IMFINZI + tremelimumab pan-tumour pool*

In patients receiving IMFINZI in combination with tremelimumab, immune-mediated thyroiditis occurred in 15 (0.7%) patients, including Grade 3 in 1 (<0.1%) patient. The median time to onset was 57 days (range: 22-141 days). Five patients received systemic corticosteroids, and 2 of the 5 patients received high-dose corticosteroid treatment (at least 40 mg prednisone or equivalent per day). Thirteen patients required other therapy, including hormone replacement therapy, thiamazole, carbimazole, propylthiouracil, perchlorate, calcium channel blocker, or beta-blocker. No patients discontinued treatment due to immune-mediated thyroiditis. Resolution occurred in 5 patients.

#### *HCC pool*

In patients receiving STRIDE, immune-mediated thyroiditis occurred in 6 (1.3%) patients. The median time to onset was 56 days (range: 7-84 days). Two patients received systemic corticosteroids, and 1 of the 2 patients received high-dose corticosteroid treatment (at least 40 mg prednisone or equivalent per day). All patients required other therapy including hormone replacement therapy, thiamazole, carbimazole, propylthiouracil, perchlorate, calcium channel blocker, or beta-blocker. Resolution occurred in 2 patients.

#### Immune-mediated adrenal insufficiency



In patients receiving IMFINZI monotherapy, immune-mediated adrenal insufficiency occurred in 14 (0.5%) patients, including Grade 3 in 3 (<0.1%) patients. The median time to onset was 146 days (range: 20-547 days). All 14 patients received systemic corticosteroids; 4 of the 14 patients received high-dose corticosteroid treatment (at least 40 mg prednisone or equivalent per day). No patients discontinued IMFINZI due to Immune-mediated adrenal insufficiency. Resolution occurred in 3 patients.

#### *IMFINZI + tremelimumab pan-tumour pool*

In patients receiving IMFINZI in combination with tremelimumab, immune-mediated adrenal insufficiency occurred in 33 (1.4%) patients, including Grade 3 in 16 (0.7%) patients and Grade 4 in 1 (<0.1%) patient. The median time to onset was 105 days (range: 20-428 days). Thirty-two patients received systemic corticosteroids, and 10 of the 32 patients received high-dose corticosteroid treatment (at least 40 mg prednisone or equivalent per day). Seven patients required endocrine therapy. Treatment was discontinued in 1 patient. Resolution occurred in 11 patients.

#### *HCC pool*

In patients receiving STRIDE, immune-mediated adrenal insufficiency occurred in 6 (1.3%) patients, including Grade 3 in 1 (0.2%) patient. The median time to onset was 64 days (range: 43-504 days). All patients received systemic corticosteroids, and 1 of the 6 patients received high-dose corticosteroid treatment (at least 40 mg prednisone or equivalent per day). Resolution occurred in 2 patients.

#### *Immune-mediated type 1 diabetes mellitus*

In patients receiving IMFINZI monotherapy, Grade 3 immune-mediated type 1 diabetes mellitus occurred in 1 (<0.1%) patient. The time to onset was 43 days. This patient required long-term insulin therapy and IMFINZI was permanently discontinued due to immune-mediated type 1 diabetes mellitus.

#### *IMFINZI + tremelimumab pan-tumour pool*

In patients receiving IMFINZI in combination with tremelimumab, immune-mediated type 1 diabetes occurred in 6 (0.3%) patients, including Grade 3 in 1 (<0.1%) patient and Grade 4 in 2 (<0.1%) patients. The median time to onset was 58 days (range: 7-220 days). All patients required insulin. Treatment was discontinued in 1 patient. Resolution occurred in 1 patient.

#### *HCC pool*

In patients receiving STRIDE, immune-mediated type 1 diabetes mellitus was not observed.

#### *Immune-mediated hypophysitis/hypopituitarism*

In patients receiving IMFINZI monotherapy, immune-mediated hypophysitis/hypopituitarism occurred in 2 (<0.1%) patients (both Grade 3). The time to onset for the events was 44 days and 50 days. Both patients received high-dose corticosteroid treatment (at least 40 mg prednisone or equivalent per day) and one patient discontinued IMFINZI due to immune-mediated hypophysitis/hypopituitarism.

#### *IMFINZI + tremelimumab pan-tumour pool*

In patients receiving IMFINZI in combination with tremelimumab, immune-mediated hypophysitis/hypopituitarism occurred in 16 (0.7%) patients, including Grade 3 in 8 (0.4%) patients. The median time to onset was 123 days (range: 63-388 days). All patients received systemic corticosteroids, and 8 of the 16 patients received high-dose corticosteroid treatment (at least 40 mg prednisone or equivalent per day). Four patients also required endocrine therapy. Treatment was discontinued in 2 patients. Resolution occurred in 7 patients.

#### *HCC pool*

In patients receiving STRIDE, immune-mediated hypophysitis/hypopituitarism occurred in 5 (1.1%) patients. The median time to onset for the events was 149 days (range: 27-242 days). Four patients received systemic corticosteroids, and 1 of the 4 patients received high-dose corticosteroid treatment

(at least 40 mg prednisone or equivalent per day). Three patients also required endocrine therapy. Resolution occurred in 2 patients.

#### Immune-mediated nephritis

In patients receiving IMFINZI monotherapy, immune-mediated nephritis occurred in 14 (0.5%) patients, including Grade 3 in 2 (< 0.1%) patients. The median time to onset was 71 days (range: 4-393 days). Nine patients received high-dose corticosteroid treatment (at least 40 mg prednisone or equivalent per day) and 1 patient also received mycophenolate. IMFINZI was discontinued in 5 patients. Resolution occurred in 8 patients.

#### *IMFINZI + tremelimumab pan-tumour pool*

In patients receiving IMFINZI in combination with tremelimumab, immune-mediated nephritis occurred in 9 (0.4%) patients, including Grade 3 in 1 (<0.1%) patient. The median time to onset was 79 days (range: 39-183 days). All patients received systemic corticosteroids, and 7 patients received high-dose corticosteroid treatment (at least 40 mg prednisone or equivalent per day). Treatment was discontinued in 3 patients. Resolution occurred in 5 patients.

#### *HCC pool*

In patients receiving STRIDE, immune-mediated nephritis occurred in 4 (0.9%) patients, including Grade 3 in 2 (0.4%) patients. The median time to onset was 53 days (range: 26-242 days). All patients received systemic corticosteroids, and 3 of the 4 received high-dose corticosteroid treatment (at least 40 mg prednisone or equivalent per day). Treatment was discontinued in 2 patients. Resolution occurred in 3 patients.

#### Immune-mediated rash

In patients receiving IMFINZI monotherapy, immune-mediated rash or dermatitis (including pemphigoid) occurred in 50 (1.7%) patients, including Grade 3 in 12 (0.4%) patients. The median time to onset was 43 days (range: 4-333 days). Twenty-four of the 50 patients received high-dose corticosteroid treatment (at least 40 mg prednisone or equivalent per day). IMFINZI was discontinued in 3 patients. Resolution occurred in 31 patients.

#### *IMFINZI + tremelimumab pan-tumour pool*

In patients receiving IMFINZI in combination with tremelimumab, immune-mediated rash or dermatitis (including pemphigoid), occurred in 112 (4.9%) patients, including Grade 3 in 17 (0.7%) patients. The median time to onset was 35 days (range: 1-778 days). All patients received systemic corticosteroids, and 57 of the 112 patients received high-dose corticosteroid treatment (at least 40 mg prednisone or equivalent per day). Treatment was discontinued in 10 patients. Resolution occurred in 65 patients.

#### *HCC pool*

In patients receiving STRIDE, immune-mediated rash or dermatitis (including pemphigoid) occurred in 26 (5.6%) patients, including Grade 3 in 9 (1.9%) patients and Grade 4 in 1 (0.2%) patients. The median time to onset was 25 days (range: 2-933 days). All patients received systemic corticosteroids and 14 of the 26 patients received high-dose corticosteroid treatment (at least 40 mg prednisone or equivalent per day). One patient received other immunosuppressants. Treatment was discontinued in 3 patients. Resolution occurred in 19 patients.

#### Infusion related reactions

In patients receiving IMFINZI monotherapy, infusion related reactions occurred in 49 (1.6%) patients, including Grade 3 in 5 (0.2%) patients. There were no Grade 4 or 5 events.

#### *IMFINZI + tremelimumab pan-tumour pool*

In patients receiving IMFINZI in combination with tremelimumab, infusion-related reactions occurred in 45 patients (2.0%), including Grade 3 in 2 (<0.1%) patients. There were no Grade 4 or 5 events.

### *HCC pool*

In patients receiving STRIDE, infusion-related reactions occurred in 13 (2.8%) patients.

### *Paediatric and adolescents*

The safety of IMFINZI in combination with tremelimumab in children and adolescents aged less than 18 years has not been established. No new safety signals were observed in a clinical study evaluating 50 paediatric patients (< 18 years), relative to the known safety profiles of IMFINZI and tremelimumab in adults. Of the 50 patients enrolled in the study, 42 received IMFINZI in combination with tremelimumab and 8 received IMFINZI only (see section 5.1).

### Immunogenicity

As with all therapeutic proteins, there is a potential for immunogenicity. Immunogenicity of IMFINZI as monotherapy is based on pooled data in 2280 patients who were treated with IMFINZI 10 mg/kg every 2 weeks or 20 mg/kg every 4 weeks as a single-agent and evaluable for the presence of anti-drug antibodies (ADA). Sixty nine patients (3.0%) tested positive for treatment emergent ADA. Neutralising antibodies against durvalumab were detected in 0.5% (12/2280) of patients. The presence of ADAs did not have a clinically relevant effect on pharmacokinetics, pharmacodynamics or safety.

In the AEGEAN study, of the 375 patients who were treated with IMFINZI 1500 mg in combination with chemotherapy every 3 weeks prior to surgery, followed by IMFINZI 1500 mg every 4 weeks following surgery, and were evaluable for the presence of ADAs, 25 (6.7%) patients tested positive for treatment emergent ADAs. Neutralizing antibodies against durvalumab were detected in 2 patients (0.5%). The presence of ADAs did not have an apparent effect on the pharmacokinetics or safety of IMFINZI.

In the CASPIAN study, of the 201 patients who were treated with IMFINZI 1500 mg every 3 weeks in combination with chemotherapy and evaluable for the presence of ADAs, 0 (0%) patients tested positive for treatment-emergent ADAs. The types of AEs reported in patients positive for durvalumab ADA were similar to those reported in patients who were negative for durvalumab ADA. The impact of treatment-emergent ADA on pharmacokinetics and clinical safety of durvalumab was not evaluable as no patient samples tested positive for treatment-emergent durvalumab ADA.

In the TOPAZ-1 study, of the 240 patients who were treated with IMFINZI 1500 mg every 3 weeks in combination with chemotherapy, followed by IMFINZI 1500 mg every 4 weeks and evaluable for the presence of ADAs, 2 (0.8%) patients tested positive for treatment-emergent ADAs. There were insufficient numbers of patients with treatment emergent ADAs or neutralizing antibodies (2 patients each) to determine whether ADAs have an impact on pharmacokinetics and clinical safety of durvalumab.

In the POSEIDON study, of the 286 patients who were treated with IMFINZI 1500 mg in combination with tremelimumab every 3 weeks and platinum-based chemotherapy and evaluable for the presence of ADAs, 29 (10.1%) patients tested positive for treatment-emergent ADAs. Neutralizing antibodies against durvalumab were detected in 1% (3/286) patients. The presence of ADAs did not have an apparent effect on pharmacokinetics or safety.

In the HIMALAYA study, of the 294 patients who were treated with STRIDE and evaluable for the presence of ADAs, 9 (3.1%) patients tested positive for treatment-emergent ADAs. Neutralizing antibodies against durvalumab were detected in 1.7% (5/294) patients. The presence of ADAs did not have an apparent effect on pharmacokinetics or safety.

Immunogenicity assay results are highly dependent on several factors, including assay sensitivity and specificity, assay methodology, sample handling, timing of sample collection, concomitant medications and underlying disease.

For these reasons, comparison of incidence of antibodies to IMFINZI with the incidence of antibodies to other products may be misleading.

## 4.9 Overdose

There is no specific treatment in the event of durvalumab overdose, and symptoms of overdose are not established. In the event of an overdose, physicians should follow general supportive measures and should treat symptomatically.

## 5. PHARMACOLOGICAL PROPERTIES

### 5.1 Pharmacodynamic properties

#### Mechanism of action

Expression of programmed cell death ligand-1 (PD-L1) protein is an adaptive immune response that helps tumors evade detection and elimination by the immune system. PD-L1 can be induced by inflammatory signals (e.g., IFN-gamma) and can be expressed on both tumor cells and tumor-associated immune cells in tumor microenvironment. PD-L1 blocks T-cell function and activation through interaction with PD-1 and CD80 (B7.1). By binding to its receptors, PD-L1 reduces cytotoxic T-cell activity, proliferation, and cytokine production.

Durvalumab is a fully human, high affinity, immunoglobulin G1 kappa (IgG1 $\kappa$ ) monoclonal antibody that selectively blocks the interaction of PD-L1 with PD-1 and CD80 (B7.1) while leaving PD-1/PD-L2 interaction intact. Durvalumab does not induce antibody dependent cell-mediated cytotoxicity (ADCC). Selective blockade of PD-L1/PD-1 and PD-L1/CD80 interactions enhances antitumour immune responses. These antitumour responses may result in tumour elimination.

In preclinical studies, PD-L1 blockade led to increased T-cell activation and decreased tumor size.

The combination of durvalumab, a PD-L1 inhibitor, and tremelimumab, a CTLA-4 inhibitor functions to enhance anti-tumour T-cell activation and function at multiple stages of the immune response, maximizing anti-tumour immunity.

The steady state AUC,  $C_{trough}$ , and  $C_{max}$  in patients administered with 1500 mg every 4 weeks are 6% higher, 19% lower, and 55% higher than those administered with 10 mg/kg every 2 weeks, respectively. Based on the modeling of pharmacokinetic data and exposure relationships for safety, there are no anticipated clinically meaningful differences in efficacy and safety for the doses of 1500 mg every 4 weeks compared to 10 mg/kg every 2 weeks in patients weighing > 30 kg with UC and NSCLC.

#### Clinical efficacy and safety

##### *Locally Advanced NSCLC - PACIFIC Study*

The efficacy of IMFINZI was evaluated in the PACIFIC Study, a randomized, double-blind, placebo-controlled, multicenter study in 713 patients with histologically or cytologically confirmed locally advanced, unresectable NSCLC. Patients had completed at least 2 cycles of definitive platinum-based chemoradiation within 1 to 42 days prior to initiation of the study and had a ECOG performance status of 0 or 1. Ninety-two percent of patients had received a total dose of 54 to 66 Gy of radiation. The study excluded patients who had progressed following chemoradiation therapy, patients with active or prior documented autoimmune disease within 2 years of initiation of the study; a history of immunodeficiency; a history of severe immune-mediated adverse reactions; medical conditions that required systemic immunosuppression, except physiological dose of systemic corticosteroids; active tuberculosis or hepatitis B or C or HIV infection or patients receiving live attenuated vaccine within 30 days before or after the start of IMFINZI. Patients were randomized 2:1 to receive 10 mg/kg IMFINZI (n=476) or placebo (n=237) via intravenous infusion every 2 weeks for up to 12 months or until unacceptable toxicity or confirmed disease progression. Randomization was stratified by gender, age

(<65 years vs. ≥ 65 years) and smoking status (smoker vs. non- smoker). Tumour assessments were conducted every 8 weeks for the first 12 months and then every 12 weeks thereafter.

The demographics and baseline disease characteristics were well balanced between study arms. Baseline demographics of the overall study population were as follows: male (70%), age ≥ 65 years (45%), white (69%), asian (27%), other (4%), current smoker (16%), past-smoker (75%), and never smoker (9%), WHO/ECOG PS 0 (49%), WHO/ECOG PS 1 (51%). Disease characteristics were as follows: Stage IIIA (53%), Stage IIIB (45%), histological sub-groups of squamous (46%), non-squamous (54%), PD-L1 expression TC≥25% (22%), PD-L1 expression TC<25% (41%). (PD-L1 status was retrospectively analysed in 451 patients with available samples, taken prior to concurrent chemoradiation therapy).

The two primary endpoints of the study were overall survival (OS) and progression-free survival (PFS) of IMFINZI vs. placebo. Secondary efficacy endpoints included Objective Response Rate (ORR), Duration of Response (DoR) and Time to Death or Distant Metastasis (TTDM). PFS, ORR, DoR and TTDM were assessed by Blinded Independent Central Review (BICR) according to RECIST v1.1.

At the primary analysis the study demonstrated a statistically significant and clinically meaningful improvement in OS in the IMFINZI-treated group compared with the placebo group [HR = 0.68 (95% CI: 0.53, 0.87), p = 0.00251]. Median OS was not reached in the IMFINZI treated group and was 28.7 months in the placebo group. The study demonstrated a statistically significant and clinically meaningful improvement in PFS in the IMFINZI-treated group compared with the placebo group [hazard ratio (HR) = 0.52 (95% CI: 0.42, 0.65), p < 0.0001]. Median PFS was 16.8 months (95% CI: 13.0, 18.1) in the IMFINZI treated group and 5.6 months (95% CI: 4.6, 7.8) in the placebo group. In the 5 year follow-up analysis, with a median follow-up of 34.2 months, IMFINZI continued to demonstrate improved OS and PFS compared to placebo. See Table 7 and Figures 1 and 2.

**Table 7. Efficacy results for the PACIFIC study<sup>a</sup>**

	Primary Analysis <sup>a</sup>		5 Year Follow-up Analysis <sup>b</sup>	
	IMFINZI (n = 476)	Placebo (n = 237)	IMFINZI (n = 476)	Placebo (n = 237)
<b>OS</b>				
Number of deaths (%)	183 (38.4%)	116 (48.9%)	264 (55.5%)	155 (65.4%)
<b>Median OS (months) (95% CI)</b>	NR (34.7, NR)	28.7 (22.9, NR)	47.5 (38.1, 52.9)	29.1 (22.1, 35.1)
HR (95% CI)	0.68 (0.53, 0.87)		0.72 (0.59, 0.89)	
2- sided p-value	0.00251			
<b>OS at 24 months (%) (95% CI)</b>	66.3% (61.7%, 70.4%)	55.6% (48.9%, 61.8%)	66.3% (61.8%, 70.4%)	55.3% (48.6%, 61.4%)
p-value	0.005			
<b>OS at 48 months (%) (95% CI)</b>	NA		49.7% (45.0%, 54.2%)	36.3% (30.1%, 42.6%)
<b>OS at 60 months (%) (95% CI)</b>	NA		42.9% (38.2%, 47.4%)	33.4% (27.3%, 39.6%)
<b>PFS</b>				
Number of events (%)	214 (45.0%)	157 (66.2%)	268 (56.3%)	175 (73.8%)
<b>Median PFS (months) (95% CI)</b>	16.8 (13.0, 18.1)	5.6 (4.6, 7.8)	16.9 (13.0, 23.9)	5.6 (4.8, 7.7)
HR (95% CI)	0.52 (0.42, 0.65)		0.55 (0.45, 0.68)	
p-value	p < 0.0001			
<b>PFS at 12 months (%) (95% CI)</b>	55.9% (51.0%, 60.4%)	35.3% (29.0%, 41.7%)	55.7% (51.0%, 60.2%)	34.5% (28.3%, 40.8%)
<b>PFS at 18 months (%) (95% CI)</b>	44.2% (37.7%, 50.5%)	27.0% (19.9%, 34.5%)	49.1% (44.2%, 53.8%)	27.5% (21.6%, 33.6%)

Reference: US PI Doc ID-005220832 V2.0, CDS 17 Nov 2023 Doc ID-003664362 v32.0

	Primary Analysis <sup>a</sup>		5 Year Follow-up Analysis <sup>b</sup>	
	IMFINZI (n = 476)	Placebo (n = 237)	IMFINZI (n = 476)	Placebo (n = 237)
<b>PFS at 60 months (%) (95% CI)</b>	NA	NA	33.1% (28.0%, 38.2%)	19.0% (13.6%, 25.2%)
<b>PFS2<sup>c</sup></b>				
Number of events (%)	217 (45.6%)	144 (60.8%)	NA	NA
<b>Median PFS2 (months) (95% CI)</b>	28.3 (25.1, 34.7)	17.1 (14.5, 20.7)	NA	NA
HR (95% CI)	0.58 (0.46, 0.73)		NA	
p-value	p < 0.0001		NA	
<b>TTDM<sup>d</sup></b>				
Number of events (%)	182 (38.2%)	126 (53.2%)	NA	NA
<b>Median TTDM (months) (95% CI)</b>	28.3 (24.0, 34.9)	16.2 (12.5, 21.1)	NA	NA
HR (95% CI)	0.53 (0.41, 0.68)		NA	
p-value	p < 0.0001		NA	
<b>TFST<sup>d</sup></b>				
Number of events (%)	267 (56.1%)	169 (71.3%)	NA	NA
<b>Median TFST (months) (95% CI)</b>	21.0 (16.6, 25.5)	10.4 (8.3, 12.5)	NA	NA
HR (95% CI)	0.58 (0.47, 0.72)		NA	
p-value	p < 0.0001		NA	
<b>ORR<sup>f</sup> n (%) (95% CI)</b>	133 (30.0%) (25.79%, 34.53%)	38 (17.8%) (12.95%, 23.65%)	NA	NA
p-value	p < 0.001		NA	
Complete Response n (%)	8 (1.8%)	1 (0.5%)	NA	NA
Partial Response n (%)	125 (28.2%)	37 (17.4%)	NA	NA
<b>Median DoR (months) (95% CI)</b>	NR (27.4, NR)	18.4 (6.7, 24.5)	NA	NA

<sup>a</sup> Primary analysis of OS, PFS2 and an updated analysis of TTDM, TFST, ORR and DoR at data cut-off 22 March 2018. Primary analysis of PFS at data cut-off 13 February 2017.

<sup>b</sup> Follow-up OS and PFS analysis at data cut-off 11 January 2021.

<sup>c</sup> PFS2 is defined as the time from the date of randomisation until the date of second progression (defined by local standard clinical practice) or death.

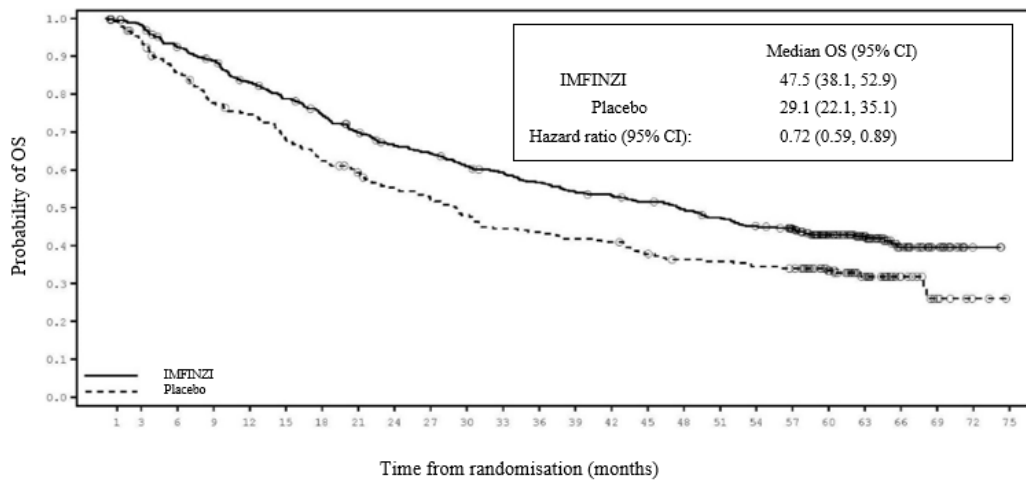
<sup>d</sup> TTDM is defined as the time from the date of randomization until the first date of distant metastasis or death in the absence of distant metastasis. Distant metastasis is defined as any new lesion that is outside of the radiation field according to RECIST v1.1 or proven by biopsy.

<sup>e</sup> TFST is defined as the time from randomization to the start date of the first subsequent therapy after discontinuation of treatment, or death.

<sup>f</sup> Based on sub-group of ITT population with measurable disease at baseline according to RECIST v1.1; IMFINZI (n = 443), Placebo (n = 213) assessed within 0-42 days after concurrent chemoradiation and before the start of study drug.

NR = Not Reached

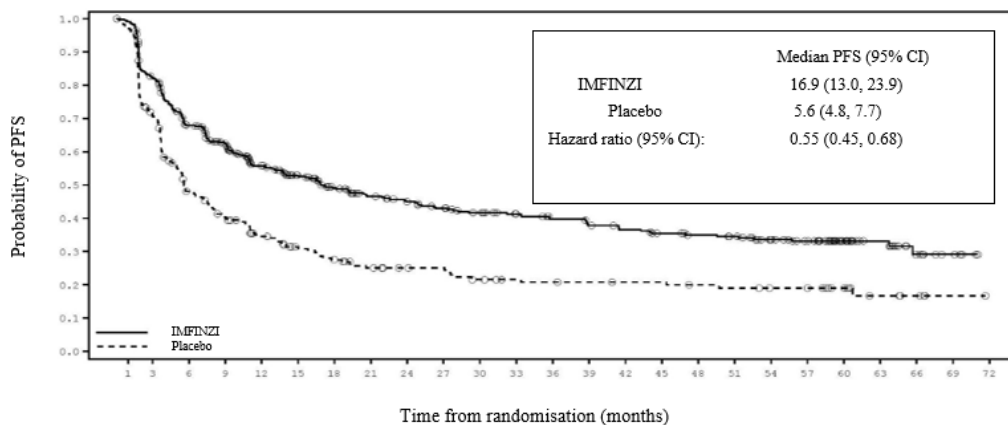
**Figure 1. Kaplan-Meier curve of OS (DCO 11 Jan 2021)**



Number of patients at risk

Month	0	3	6	9	12	15	18	21	24	27	30	33	36	39	42	45	48	51	54	57	60	63	66	69	72	75
IMFINZI	476	464	451	414	385	364	343	319	298	289	273	264	252	241	236	227	218	207	196	183	134	91	40	18	2	0
Placebo	237	220	199	179	171	156	143	133	123	116	10	99	97	93	91	83	78	77	74	72	56	33	16	7	2	0

**Figure 2. Kaplan-Meier curve of PFS (DCO 11 Jan 2021)**



Number of patients at risk

Month	0	3	6	9	12	15	18	21	24	27	30	33	36	42	45	48	51	54	57	60	63	66	69	72
IMFINZI	476	377	301	267	215	190	165	147	137	128	119	110	103	92	85	81	78	67	57	34	22	11	5	0
Placebo	237	164	105	87	68	56	48	41	37	36	30	27	26	24	24	22	21	19	19	14	6	4	1	0

The improvements in OS and PFS in favor of patients receiving IMFINZI compared to those receiving placebo were consistently observed across predefined subgroups analyzed. Sensitivity analyses of OS and PFS demonstrated a consistent treatment effect with that observed in the primary analysis.

#### *Patient reported outcomes*

Patient-reported symptoms, function and health-related quality of life (HRQoL) were collected using the EORTC QLQ-C30 and its lung cancer module (EORTC QLQ-LC13). The LC13 and C30 were assessed at baseline, every 4 weeks for the first 8 weeks, followed by every 8 weeks until completion of the treatment period or discontinuation of study drug due to toxicity or disease progression. Compliance was high and very similar between the IMFINZI and placebo treatment groups.

At baseline, no differences in patient reported symptoms, function and HRQoL were observed between IMFINZI and placebo groups. Throughout the duration of the study to Week 48, there was no

clinically meaningful difference between IMFINZI and placebo groups in symptoms, functioning and HRQoL (as assessed by a difference of greater than or equal to 10 points).

### ***Metastatic NSCLC – POSEIDON Study***

POSEIDON was a study designed to evaluate the efficacy of IMFINZI with or without tremelimumab in combination with platinum-based chemotherapy. POSEIDON was a randomised, open-label, multicentre study in 1013 metastatic NSCLC patients with no sensitizing epidermal growth factor receptor (EGFR) mutation or anaplastic lymphoma kinase (ALK) genomic tumour aberrations. Patients with a histologically or cytologically documented metastatic NSCLC were eligible for enrolment. Patients had no prior chemotherapy or any other systemic therapy for metastatic NSCLC. Prior to randomisation, patients had tumour PD-L1 status confirmed by using the Ventana PD-L1 (SP263) Assay. Patients had a World Health Organization/Eastern Cooperative Oncology Group (ECOG) performance status of 0 or 1.

The study excluded patients with active or prior documented autoimmune disease; active and/or untreated brain metastases; a history of immunodeficiency; administration of systemic immunosuppression within 14 days before the start of IMFINZI or tremelimumab, except physiological dose of systemic corticosteroids; active tuberculosis or hepatitis B or C or HIV infection; or patients receiving live attenuated vaccine within 30 days before or after the start of IMFINZI and/or tremelimumab.

Randomisation was stratified by tumour cells (TC) PD-L1 expression ( $TC \geq 50\%$  vs.  $TC < 50\%$ ), disease stage (Stage IVA vs. Stage IVB), and histology (non-squamous vs. squamous).

Patients were randomised 1:1:1 to receive:

- Arm 1: IMFINZI 1500 mg with tremelimumab 75 mg and platinum-based chemotherapy every 3 weeks for 4 cycles, followed by, IMFINZI 1500 mg every 4 weeks as monotherapy. A fifth dose of tremelimumab 75 mg was given at Week 16 alongside IMFINZI dose 6.
- Arm 2: IMFINZI 1500 mg and platinum-based chemotherapy every 3 weeks for 4 cycles, followed by, IMFINZI 1500 mg every 4 weeks as monotherapy.
- Arm 3: Platinum-based chemotherapy every 3 weeks for 4 cycles as monotherapy. Patients could receive additional 2 cycles (a total of 6 cycles post-randomisation), as clinically indicated, at Investigator's discretion.

In the 3 treatment arms, patients received one of the following histology-based chemotherapy regimens:

- Non-squamous NSCLC
  - Pemetrexed 500 mg/m<sup>2</sup> with carboplatin AUC 5-6 or cisplatin 75 mg/m<sup>2</sup> every 3 weeks, unless contraindicated by the investigator, pemetrexed maintenance could be given
- Squamous NSCLC
  - Gemcitabine 1000 or 1250 mg/m<sup>2</sup> on Days 1 and 8 with cisplatin 75 mg/m<sup>2</sup> or carboplatin AUC 5-6 on Day 1 every 3 weeks
- Non-squamous and Squamous NSCLC
  - Nab-paclitaxel 100 mg/m<sup>2</sup> on Days 1, 8, and 15 with carboplatin AUC 5-6 on Day 1 every 3 weeks

Tremelimumab was given up to a maximum of 5 doses unless there was disease progression or unacceptable toxicity. IMFINZI and histology-based pemetrexed maintenance therapy (when applicable) was continued until disease progression or unacceptable toxicity. Administration of IMFINZI monotherapy was permitted beyond disease progression if the patient was clinically stable and deriving clinical benefit as determined by the investigator. Patients with disease progression during IMFINZI monotherapy were given the option to be retreated with 4 additional cycles of tremelimumab alongside IMFINZI.



Tumour assessments were conducted at Week 6 and Week 12 from the date of randomisation, and then every 8 weeks until confirmed objective disease progression. Survival assessments were conducted every 2 months following treatment discontinuation.

The dual primary endpoints of the study were PFS and OS for IMFINZI + platinum-based chemotherapy (Arm 2) vs. platinum-based chemotherapy alone (Arm 3). The key secondary endpoints of the study were PFS and OS for IMFINZI + tremelimumab + platinum-based chemotherapy (Arm 1) vs. platinum-based chemotherapy alone (Arm 3). The secondary endpoints included ORR and DoR. PFS, ORR, and DoR were assessed using BICR according to RECIST v1.1. At planned analyses for OS and PFS, IMFINZI + tremelimumab + platinum-based chemotherapy (Arm 1) vs. platinum-based chemotherapy (Arm 3) met the efficacy boundaries for the endpoints of OS and PFS. The results are summarised below.

The demographics and baseline disease characteristics were generally well-balanced between study arms. Baseline demographics of the overall study population were as follows: male (76.0%), age  $\geq$  65 years (47.1%), white (55.9%), Asian (34.6%), black or African American (2.0%), other (7.6%), non-Hispanic or Latino (84.2%), current smoker or past-smoker (78.0%), and never smoker (21.9%), WHO/ECOG PS 0 (33.4%), WHO/ECOG PS 1 (66.5%). Disease characteristics were as follows: Stage IVA (50.0%), Stage IVB (49.6%), histological sub-groups of squamous (36.9%), non-squamous (62.9%), PD-L1 expression TC $\geq$ 50% (28.8%), PD-L1 expression TC <50% (71.1%).

The study demonstrated a statistically significant and clinically meaningful improvement in OS in the IMFINZI + tremelimumab + platinum-based chemotherapy (Arm 1) vs. platinum-based chemotherapy alone (Arm 3) [HR=0.77 (95% CI: 0.650, 0.916), p=0.00304]. IMFINZI + tremelimumab + platinum-based chemotherapy demonstrated a statistically significant and clinically meaningful improvement in PFS vs. platinum-based chemotherapy alone (Arm 3) [HR=0.72 (95% CI: 0.600, 0.860), p=0.00031]. See Table 8 and Figures 3 and 4.

**Table 8. Efficacy Results for the POSEIDON Study**

	<b>Arm 1: IMFINZI+tremelimumab+ platinum-based chemotherapy (n=338)</b>	<b>Arm 3: Platinum-based chemotherapy (n=337)</b>
<b>OS<sup>a</sup></b>		
Number of deaths (%)	251 (74.3)	285 (84.6)
Median OS (months) (95% CI)	14.0 (11.7, 16.1)	11.7 (10.5, 13.1)
HR (95% CI)	0.77 (0.650, 0.916)	
p-value <sup>b</sup>	0.00304	
<b>OS at 12 months (%) (95% CI)</b>	54.8 (49.3, 60.0)	49.1 (43.6, 54.4)
<b>OS at 24 months (%) (95% CI)</b>	32.9 (27.9, 37.9)	22.1 (17.8, 26.8)
<b>OS at 36 months (%) (95% CI)</b>	25.3 (20.8, 30.2)	13.3 (9.8, 17.4)
<b>PFS<sup>a</sup></b>		
Number of events (%)	238 (70.4)	258 (76.6)
Median PFS (months) (95% CI)	6.2 (5.0, 6.5)	4.8 (4.6, 5.8)
HR (95% CI)	0.72 (0.600, 0.860)	
p-value <sup>b</sup>	0.00031	
PFS at 12 months (%) (95% CI)	26.6 (21.7, 31.7)	13.1 (9.3, 17.6)
<b>ORR n (%)<sup>c</sup></b>	130 (38.8)	81 (24.4)
Complete Response n (%)	2 (0.6)	0
Partial Response n (%)	128 (38.2)	81 (24.4)

Odds ratio (95% CI)	2.00 (1.428, 2.807)	
p-value	<0.001	
<b>Median DoR (months)</b> <b>(95% CI)</b>	9.5 (7.2, NR)	5.1 (4.4, 6.0)

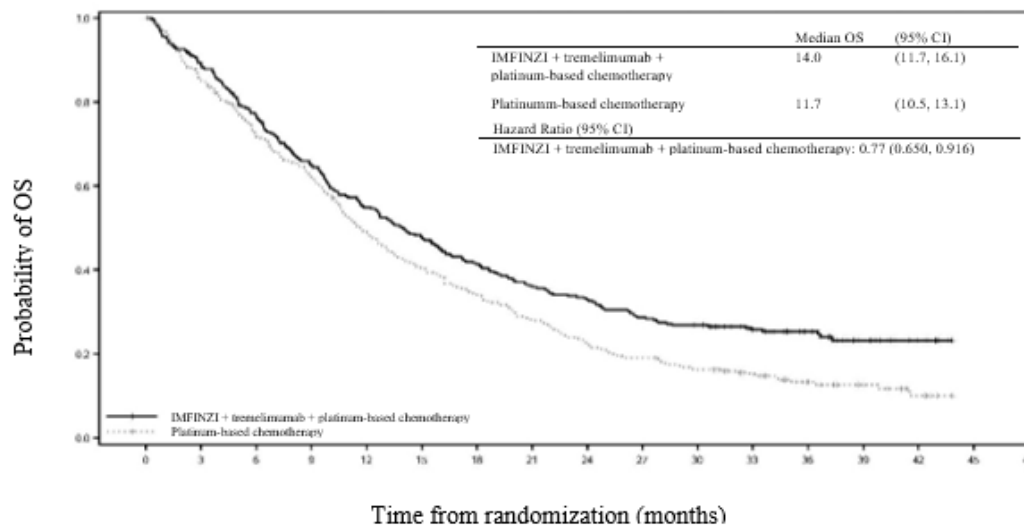
<sup>a</sup> PFS/OS results are based on planned analyses which occurred 25/45 months respectively after study initiation. The boundaries for declaring efficacy (PFS 0.00735, OS 0.00797 2-sided) were determined by a Lan-DeMets alpha spending function that approximates an O'Brien Fleming approach.

<sup>b</sup> 2-sided p-value based on a log-rank test stratified by PD-L1, histology and disease stage.

<sup>c</sup> Confirmed Objective Response.

NR=Not Reached, CI=Confidence Interval

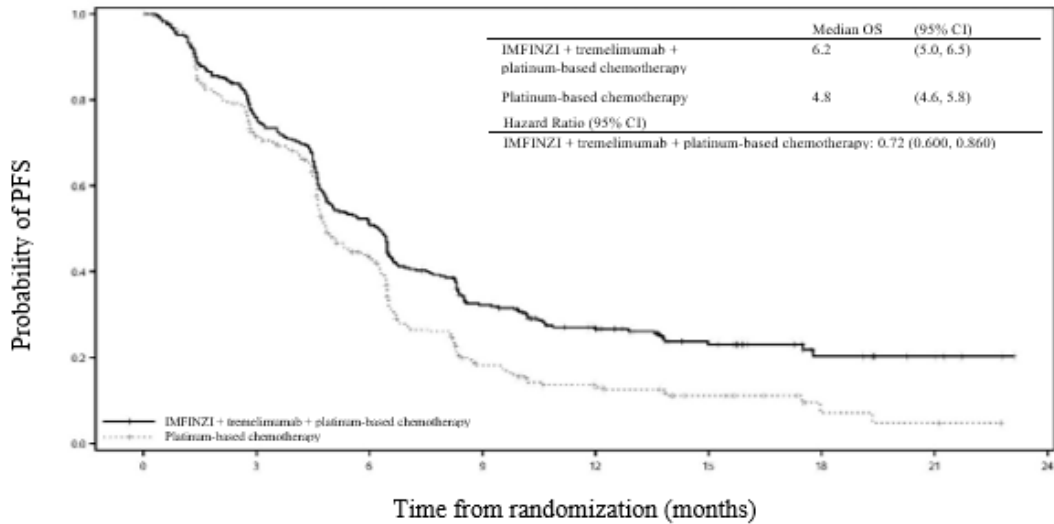
**Figure 3. Kaplan-Meier curve of OS**



**Number of patients at risk**

Month	0	3	6	9	12	15	18	21	24	27	30	33	36	39	42	45
IMFINZI + tremelimumab + platinum-based chemotherapy	338	298	256	217	183	159	137	120	109	95	88	64	41	20	9	0
Platinum-based chemotherapy	337	284	236	204	160	132	111	91	72	62	52	38	21	13	6	0

**Figure 4. Kaplan-Meier curve of PFS**



**Number of patients at risk**

Month	0	3	6	9	12	15	18	21	24
IMFINZI + tremelimumab + platinum-based chemotherapy	338	243	161	94	56	32	13	5	0
Platinum-based chemotherapy	337	219	121	43	23	12	3	2	0

*Subgroup analysis*

The improvements in OS and PFS favour patients receiving IMFINZI + tremelimumab + platinum-based chemotherapy compared to those receiving platinum-based chemotherapy alone and were consistently observed across the prespecified subgroups based on demographic and baseline characteristics, biomarker status, histology, planned chemotherapy, and disease characteristics. An exception was noted in the never smoker subgroup for OS. However, due to the small numbers of patients, no definitive conclusions can be drawn from these data.

*Patient Reported Outcomes*

Patient-reported symptoms, function and health-related quality of life (HRQoL) were collected using the EORTC QLQ-C30 and its lung cancer module (EORTC QLQ-LC13). Both questionnaires were administered up to second disease progression (PFS2) or death (whichever came first). At baseline, patient-reported symptoms, functioning or HRQoL scores were comparable between the study arms. Overall compliance for EORTC QLQ-C30 and EORTC QLQ-L13 were 73.0% and 72.8% in the T + D + SoC arm and 65.0% and 64.8% in the SoC chemotherapy arm.

*Delay in time to deterioration (TTD) of symptoms, functioning, and global health status/QoL:*

D+T+SoC prolonged the median TTD in patient-reported symptoms, functioning and global health status/QoL compared to SoC alone (see Tables 9 and 10). Nominally significant differences in TTD in favor of T + D + SoC compared to SoC alone were observed for the pre-specified domains of interest of global health status/QoL, physical functioning and dyspnea (EORTC QLQ-LC13) (HRs ranging from 0.75 to 0.78; nominal p-values <0.05).

**Table 9: Median time to deterioration in global health status/QoL and function (EORTC QLQ-C30)<sup>a</sup>**

PRO domain	Statistic	D +T+SoC (N=338)	SoC (N=337)
Global health status/QoL <sup>a</sup>	n <sup>b</sup>	319	318
	Median time to deterioration (months)	8.3	5.6
	HR <sup>c</sup> (95% CI)	0.78 (0.631, 0.961)	

PRO domain	Statistic	D +T+SoC	SoC
		(N=338)	(N=337)
	p-value <sup>d</sup>	0.021	
Physical <sup>a</sup>	n <sup>b</sup>	323	320
	Median time to deterioration (months)	7.7	5.3
	HR <sup>c</sup> (95% CI)	0.75 (0.610, 0.920)	
	p-value <sup>d</sup>	0.006	
Cognitive	n <sup>b</sup>	323	318
	Median time to deterioration (months)	7.6	5.8
	HR <sup>c</sup> (95% CI)	0.79 (0.644, 0.975)	
	p-value <sup>d</sup>	0.028	
Role	n <sup>b</sup>	314	304
	Median time to deterioration (months)	6.6	4.8
	HR <sup>c</sup> (95% CI)	0.81 (0.664, 0.999)	
	p-value <sup>d</sup>	0.049	
Emotional	n <sup>b</sup>	322	315
	Median time to deterioration (months)	8.5	7.5
	HR <sup>c</sup> (95% CI)	0.87 (0.697, 1.082)	
	p-value <sup>d</sup>	0.208	
Social	n <sup>b</sup>	320	314
	Median time to deterioration (months)	6.4	5.7
	HR <sup>c</sup> (95% CI)	0.85 (0.687, 1.045)	
	p-value <sup>d</sup>	0.120	

<sup>a</sup> Pre-specified PRO domains of interest

<sup>b</sup> Number of patients with a baseline global health status/QoL or function score  $\geq 10$  that were included in the time to deterioration analysis

<sup>c</sup> A hazard ratio  $< 1$  favours D+T+SoC

<sup>d</sup> p-values for time to deterioration based on stratified log-rank test adjusting for PD-L1 (PD-L1  $\geq 50\%$  vs PD-L1  $< 50\%$ ), histology (squamous vs non-squamous), and disease stage (Stage IVA vs Stage IVB). They were not adjusted for multiplicity

**Table 10: Median time to deterioration in symptoms (EORTC QLQ-C30 and QLQ-LC13)<sup>a</sup>**

PRO domain	Statistic	D	SoC
		+T+SoC	(N=337)
		(N=338)	
Coughing <sup>a</sup>	n <sup>b</sup>	302	295
	Median time to deterioration (months)	9.7	8.8
	HR <sup>c</sup> (95% CI)	0.91 (0.722, 1.146)	
	p-value <sup>d</sup>	0.418	
Dyspnoea (QLQ-C30)	n <sup>b</sup>	310	301
	Median time to deterioration (months)	7.9	6.7
	HR <sup>c</sup> (95% CI)	0.84 (0.678, 1.047)	
	p-value <sup>d</sup>	0.123	
Dyspnoea (QLQ-LC13) <sup>a</sup>	n <sup>b</sup>	325	316
	Median time to deterioration (months)	5.4	3.6
	HR <sup>c</sup> (95% CI)	0.77 (0.635, 0.936)	
	p-value <sup>d</sup>	0.009	
Pain	n <sup>b</sup>	316	298
	Median time to deterioration (months)	8.9	5.7
	HR <sup>c</sup> (95% CI)	0.70 (0.563, 0.862)	
	p-value <sup>d</sup>	$< 0.001$	
Chest pain <sup>a</sup>	n <sup>b</sup>	319	309
	Median time to deterioration (months)	10.0	8.6

PRO domain	Statistic	D +T+SoC (N=338)		SoC (N=337)	
		HR <sup>c</sup> (95% CI)		0.85 (0.681, 1.066)	
Arm or shoulder pain	n <sup>b</sup>	312	310		
	Median time to deterioration (months)	8.9	8.8		
	HR <sup>c</sup> (95% CI)	0.93 (0.745, 1.161)			
	p-value <sup>d</sup>	0.517			
Pain in other parts of body	n <sup>b</sup>	312	306		
	Median time to deterioration (months)	9.7	5.8		
	HR <sup>c</sup> (95% CI)	0.74 (0.597, 0.921)			
	p-value <sup>d</sup>	0.007			
Fatigue <sup>a</sup>	n <sup>b</sup>	317	314		
	Median time to deterioration (months)	3.7	2.8		
	HR <sup>c</sup> (95% CI)	0.90 (0.746, 1.084)			
	p-value <sup>d</sup>	0.272			
Insomnia	n <sup>b</sup>	311	301		
	Median time to deterioration (months)	8.3	5.8		
	HR <sup>c</sup> (95% CI)	0.74 (0.598, 0.921)			
	p-value <sup>d</sup>	0.007			
Appetite loss <sup>a</sup>	n <sup>b</sup>	308	305		
	Median time to deterioration (months)	7.2	7.0		
	HR <sup>c</sup> (95% CI)	0.94 (0.754, 1.169)			
	p-value <sup>d</sup>	0.570			
Constipation	n <sup>b</sup>	315	306		
	Median time to deterioration (months)	9.2	6.1		
	HR <sup>c</sup> (95% CI)	0.78 (0.627, 0.972)			
	p-value <sup>d</sup>	0.026			
Diarrhoea	n <sup>b</sup>	324	320		
	Median time to deterioration (months)	11.0	10.8		
	HR <sup>c</sup> (95% CI)	1.00 (0.792, 1.260)			
	p-value <sup>d</sup>	0.986			
Nausea/vomiting	n <sup>b</sup>	322	319		
	Median time to deterioration (months)	7.8	5.6		
	HR <sup>c</sup> (95% CI)	0.81 (0.655, 0.994)			
	p-value <sup>d</sup>	0.045			
Haemoptysis	n <sup>b</sup>	325	318		
	Median time to deterioration (months)	17.8	11.4		
	HR <sup>c</sup> (95% CI)	0.77 (0.598, 0.984)			
	p-value <sup>d</sup>	0.036			

<sup>a</sup> Pre-specified PRO domains of interest

<sup>b</sup> Number of patients with a baseline symptom score  $\leq 90$  that were included in the time to deterioration analysis

<sup>c</sup> A hazard ratio  $< 1$  favours D+T+SoC

<sup>d</sup> p-values for time to deterioration based on stratified log-rank test adjusting for PD-L1 (PD-L1  $\geq 50\%$  vs PD-L1  $< 50\%$ ), histology (squamous vs non-squamous), and disease stage (Stage IVA vs Stage IVB). They were not adjusted for multiplicity

### **Resectable NSCLC – AEGEAN Study**

AEGEAN was a randomized, double-blind, placebo-controlled, multicentre, Phase III study designed to evaluate the efficacy of IMFINZI in combination with chemotherapy as neoadjuvant treatment, then continued as IMFINZI monotherapy after surgery, in patients with resectable NSCLC (Stage IIA to

select Stage IIIB [AJCC, 8th edition]). The study enrolled previously untreated patients with documented squamous or non-squamous NSCLC and no prior exposure to immune-mediated therapy, a WHO/ECOG Performance status of 0 or 1, and at least one RECIST 1.1 target lesion. Prior to randomization, patients had tumour PD-L1 expression status confirmed using the Ventana PD-L1 (SP263) Assay.

The study excluded patients with active or prior documented autoimmune disease, or use of immunosuppressive medication within 14 days of the first dose of durvalumab. The study population for efficacy analysis (modified intent-to-treat [mITT]) excluded patients with known EGFR mutations or ALK rearrangements.

Randomisation was stratified by disease stage (Stage II vs. Stage III) and by PD-L1 expression (TC<1% vs. TC≥1%) status.

The AEGEAN study randomized 802 patients in a 1:1 ratio to receive perioperative IMFINZI (Arm 1) or placebo (Arm 2) in combination with neoadjuvant chemotherapy. Crossover between the study arms was not permitted. Efficacy analysis was conducted based on 740 patients in the mITT population.

- Arm 1: IMFINZI 1500 mg + chemotherapy every 3 weeks for up to 4 cycles prior to surgery, followed by IMFINZI 1500 mg every 4 weeks for up to 12 cycles after surgery
- Arm 2: Placebo + chemotherapy every 3 weeks for up to 4 cycles prior to surgery, followed by Placebo every 4 weeks for up to 12 cycles after surgery.

A RECIST 1.1 tumour assessment was performed at baseline, and upon completion of the neoadjuvant period (prior to surgery). The first post-surgical CT/MRI scan of the chest and abdomen (including the entire liver and both adrenals) was acquired 5 weeks ±2 weeks after surgery and prior to, but as close as possible to the start of adjuvant therapy. Tumour assessments were then conducted every 12 weeks (relative to the date of surgery) until week 48, every 24 weeks (relative to the date of surgery) until week 192 (approximately 4 years), and then every 48 weeks (relative to the date of surgery) thereafter until RECIST 1.1 defined radiological PD, consent withdrawal, or death.

Survival assessments were conducted at month 2, 3, and 4 following treatment discontinuation and then every 2 months until month 12 followed by every 3 months.

The primary endpoints of the study were pathological complete response (pCR) by blinded central pathology review, and event-free survival (EFS) by blinded independent central review (BICR) assessment. The key secondary endpoints were major pathological response (MPR) by blinded central pathology review, DFS by BICR, and OS. Other secondary efficacy objectives included were EFS (PD-L1-TC ≥1% analysis set), pCR (PD-L1-TC ≥1% analysis set), and Patient Reported Outcomes (PRO).

At the planned interim analysis of pCR, the study met its prespecified boundary for declaring statistical significance for pCR and MPR. Subsequently, at the first planned interim analysis of EFS, the study met its prespecified boundary for declaring statistical significance for EFS.

The demographics and baseline disease characteristics were well balanced between the two study arms (366 patients in Arm 1 and 374 patients in Arm 2 of the mITT set). Baseline demographics and disease characteristics of the population for efficacy analysis (mITT) were as follows: male (71.6%), female (28.4%), age ≥ 65 years (51.6%), median age 65 years (range: 30 to 88), WHO/ECOG PS 0 (68.4%), WHO/ECOG PS 1 (31.6), White (53.6%), Asian (41.5%), Black or African American (0.9%), American Indian or Alaska Native (1.4%), Other Race (2.6%), Hispanic or Latino (16.1%), Not Hispanic or Latino (83.9%), current or past smokers (85.5%), never smoker (14.5%), squamous histology (48.6%) and non-squamous histology (50.7%), Stage II (28.4%), Stage III (71.6%), PD-L1 expression status TC ≥1% (66.6%), PD-L1 expression status TC <1% (33.4%). The demographics and baseline characteristics for the mITT population were similar to the ITT population except for the absence of patients with known EGFR mutations or ALK rearrangements.

In the mITT population there were 295 (80.6%) patients in Arm 1 who underwent curative intent surgery compared to 302 (80.7%) patients in Arm 2. There were 284 (77.6%) patients in Arm 1 who completed curative intent surgery compared to 287 (76.7%) patients in Arm 2. The resection margin status within the mITT population, who completed surgery, was (Arm 1 vs. Arm 2).

- R0 (no residual tumour): 94.7% vs. 91.3%
- R1 (microscopic residual tumour): 4.2% vs. 7.7%
- R2 (macroscopic residual tumour): 0.7% vs. 0.7%

The study demonstrated a statistically significant and clinically meaningful improvement in EFS [HR = 0.68 (95% CI: 0.53, 0.88), p = 0.003902] of the IMFINZI arm compared to the placebo arm. The study also demonstrated a statistically significant and meaningful improvement in pCR [Difference in proportions, 12.96% (95% CI: 8.67, 17.57)] of the IMFINZI arm compared to the placebo arm. Overall survival (OS) data were not mature at the time of EFS analysis. See Table 11 and Figure 5.

**Table 11: Efficacy Results for the AEGEAN Study (mITT)**

	<b>IMFINZI + chemotherapy (N = 366)</b>	<b>Placebo + chemotherapy (N = 374)</b>
<b>EFS<sup>a</sup></b>		
Number of events, n (%)	98 (26.8)	138 (36.9)
Median EFS (95% CI) (months)	NR (31.9, NR)	25.9 (18.9, NR)
EFS at 12 months, % (95% CI)	73.4 (67.9, 78.1)	64.5 (58.8, 69.6)
EFS at 24 months, % (95% CI)	63.3 (56.1, 69.6)	52.4 (45.4, 59.0)
Hazard ratio (95% CI)	0.68 (0.53, 0.88)	
2-sided p-value <sup>d</sup>	0.003902	
<b>pCR<sup>a,b,d</sup></b>		
Number of patients with response	63	16
Response rate, % (95% CI)	17.21 (13.49, 21.48)	4.28 (2.46, 6.85)
Difference in proportions, % (95% CI)	12.96 (8.67, 17.57)	
<b>MPR<sup>a,c,d</sup></b>		
Number of patients with response	122	46
Response rate, % (95% CI)	33.33 (28.52, 38.42)	12.30 (9.15, 16.06)
Difference in proportions, % (95% CI)	21.03 (15.14, 26.93)	

<sup>a</sup> Results are based on planned EFS interim analysis and pCR/MPR final analysis (DCO: 10 November 2022) which occurred 46.3 months after study initiation.

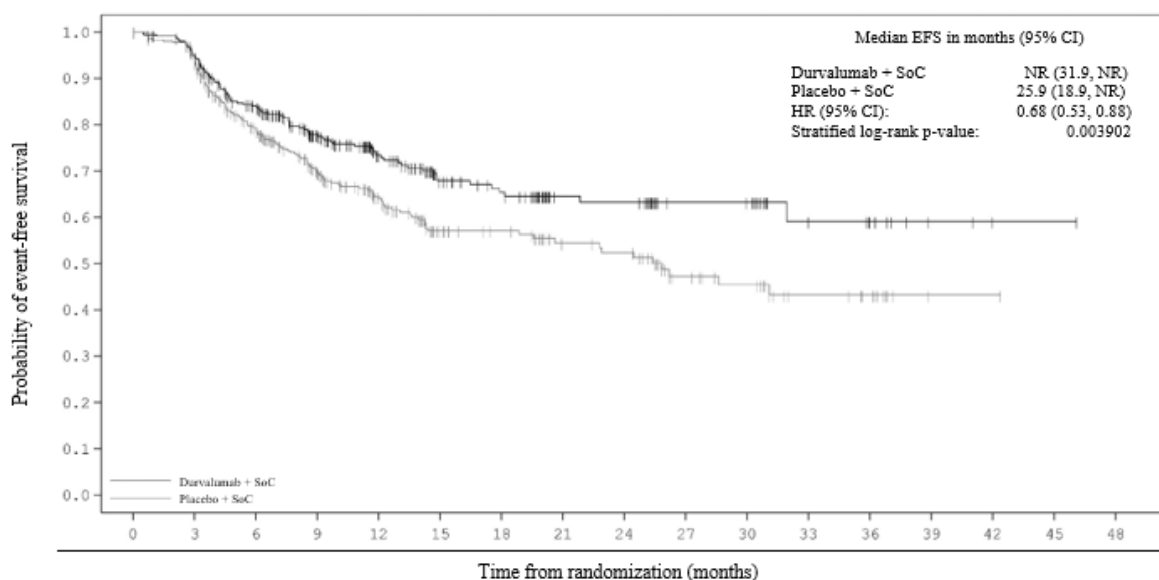
<sup>b</sup> Based on a pre-specified pCR interim analysis (DCO: 14 January 2022) in n=402, the pCR rate was statistically significant (p = 0.000036) compared to significance level of 0.0082%.

<sup>c</sup> Based on a pre-specified MPR interim analysis (DCO: 14 January 2022) in n=402, the MPR rate was statistically significant (p= 0.000002) compared to significance level of 0.0082%.

<sup>d</sup> The 2-sided p-value for pCR and MPR was calculated based on a stratified CMH test. The 2-sided p-value for EFS was calculated based on based on a stratified log-rank test. Stratification factors include PD-L1 and disease stage.

The boundary for declaring statistical significance for each of the efficacy endpoints were determined by a Lan-DeMets alpha spending function that approximates an O'Brien Fleming approach (EFS = 0.9899%, pCR = 0.0082%, MPR = 0.0082%, 2-sided).

**Figure 5: Kaplan-Meier Curve of EFS**



### Subgroup analysis

The improvement in EFS and pCR favouring patients in Arm 1 compared to patients in Arm 2 were consistently observed across prespecified subgroups based on demographic and baseline disease characteristics, histology, and planned chemotherapy.

### Patient Reported Outcomes (PRO)

Patient-reported symptoms, function, and health related quality of life (HRQoL) were collected using the EORTC QLQ-C30, complementary EORTC QLQ-LC13, and exploratory PGIS, EQ-5D-5L, and PRO-CTCAE. These questionnaires were administered before discussion of disease progression and dosing and collected on month 1, 2, 3, and 6 post last dose. Overall compliance rates were high at neoadjuvant baseline (>90%) in the IMFINZI in combination with chemotherapy arm and the placebo in combination with chemotherapy arm.

Overall, the PRO/HRQoL data was generally similar between treatment arms throughout the neoadjuvant period. The proportion of patients with a clinically meaningful ( $\geq 10$  point change) improvement in EORTC QLQ-C30 GHS/QoL was similar over the neoadjuvant period (reported for approximately a quarter of patients in both treatment arms). Clinically meaningful changes ( $\geq 10$  point from baseline) were observed in only two scales: worsening fatigue (EORTC QLQ-C30) in the D + CTx arm (12.57 points [D + CTx] vs 8.50 points [placebo + CTx]) and decreased coughing (EORTC QLQ-LC13) in the placebo + CTx arm ( 9.26 points [D + CTx] vs -11.60 points [placebo + CTx]).

### SCLC – CASPIAN Study

The efficacy of IMFINZI in combination with etoposide and either carboplatin or cisplatin in previously untreated ES-SCLC was investigated in CASPIAN, a randomized, multicenter, active-controlled, open-label trial (NCT03043872). Eligible patients had WHO Performance Status of 0 or 1 and were suitable to receive a platinum-based chemotherapy regimen as first-line treatment for SCLC. Patients with asymptomatic or treated brain metastases were eligible. Choice of platinum agent was at the investigator's discretion, taking into consideration the calculated creatinine clearance. Patients with history of chest radiation therapy; a history of active primary immunodeficiency; autoimmune disorders including paraneoplastic syndrome; active or prior documented autoimmune or inflammatory disorders; use of systemic immunosuppressants within 14 days before the first dose of the treatment except physiological dose of systemic corticosteroids were ineligible.

Randomization was stratified by the planned platinum-based therapy in cycle 1 (carboplatin or cisplatin).



The evaluation of efficacy for ES-SCLC relied on comparison between:

- IMFINZI 1500 mg, and investigator’s choice of carboplatin (AUC 5 or 6 mg/mL/min) or cisplatin (75-80 mg/m<sup>2</sup>) on Day 1 and etoposide (80-100 mg/m<sup>2</sup>) intravenously on Days 1, 2, and 3 of each 21-day cycle for 4 cycles, followed by IMFINZI 1,500 mg every 4 weeks until disease progression or unacceptable toxicity, or
- Investigator’s choice of carboplatin (AUC 5 or 6 mg/mL/min) or cisplatin (75-80 mg/m<sup>2</sup>) on Day 1 and etoposide (80-100 mg/m<sup>2</sup>) intravenously on Days 1, 2, and 3 of each 21-day cycle, up to 6 cycles. After completion of chemotherapy, prophylactic cranial irradiation (PCI) as administered per investigator discretion.

Administration of IMFINZI as a single agent was permitted beyond disease progression if the patient was clinically stable and deriving clinical benefit as determined by the investigator.

The major efficacy outcome measure was overall survival (OS) of IMFINZI plus chemotherapy vs. chemotherapy alone. Additional efficacy outcome measures were investigator-assessed progression-free survival (PFS) and objective response rate (ORR), per RECIST v1.1.

The study population characteristics were: median age of 63 years (range: 28 to 82); 40% age 65 or older; 70% male; 84% White, 15% Asian, and 0.9% Black; 65% WHO/ECOG PS of 1; and 93% were former/current smokers. Ninety percent of patients had Stage IV disease and 10% had brain metastasis at baseline. A total of 25% of the patients received cisplatin and 74% of the patients received carboplatin. In the chemotherapy alone arm, 57% of the patients received 6 cycles of chemotherapy, and 8% of the patients received PCI.

The OS results are summarized in Table 12 and Figure 6.

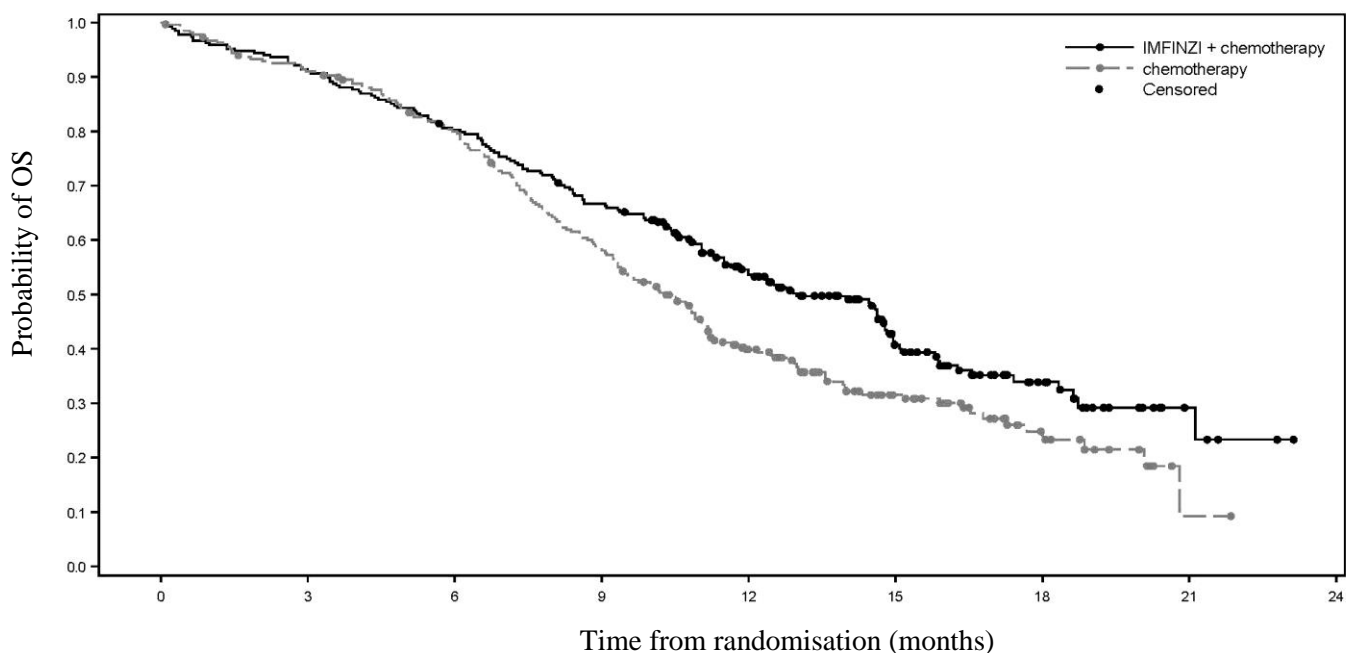
**Table 12. OS Result for the CASPIAN Study**

<b>Endpoint</b>	<b>IMFINZI with Etoposide and either Carboplatin or Cisplatin (n=268)</b>	<b>Etoposide and either Carboplatin or Cisplatin (n=269)</b>
<b>Overall Survival (OS)</b>		
Number of deaths (%) <sup>1</sup>	155 (58)	181 (67)
Median OS (months) (95% CI)	13.0 (11.5, 14.8)	10.3 (9.3, 11.2)
Hazard Ratio (95% CI) <sup>2</sup>	0.73 (0.59, 0.91)	
p-value <sup>1</sup>	0.0047	

<sup>1</sup> At a pre-specified interim analysis, 336 OS events (79% of total planned events) were observed, and the boundary for declaring efficacy (0.0178) was determined by a Lan-Demets alpha spending function with O’Brien Fleming type boundary

<sup>2</sup> The analysis was performed using the stratified log-rank test, adjusting for planned platinum therapy in Cycle 1 (carboplatin or cisplatin) and using the rank tests of association approach

**Figure 6. Kaplan-Meier Curves of Overall Survival in the CASPIAN Study**



Number of patients at risk	0	3	6	9	12	15	18	21	24
IMFINZI + chemotherapy	268	244	214	177	116	57	25	5	0
chemotherapy	269	242	209	153	82	44	17	1	0

Investigator-assessed PFS (96% of total planned events) showed a HR of 0.78 (95% CI: 0.65, 0.94), with median PFS of 5.1 months (95% CI: 4.7, 6.2) in the IMFINZI plus chemotherapy arm and 5.4 months (95% CI: 4.8, 6.2) in the chemotherapy alone arm. The investigator-assessed confirmed ORR was 68% (95% CI: 62%, 73%) in the IMFINZI plus chemotherapy arm and 58% (95% CI: 52%, 63%) in the chemotherapy alone arm.

In the exploratory subgroup analyses of OS based on the planned platinum chemotherapy received at cycle 1, the HR was 0.70 (95% CI 0.55, 0.89) in patients who received carboplatin, and the HR was 0.88 (95% CI 0.55, 1.41) in patients who received cisplatin.

### ***BTC – TOPAZ-1 Study***

TOPAZ-1 was a study designed to evaluate the efficacy of IMFINZI in combination with gemcitabine and cisplatin. TOPAZ-1 was a randomised, double-blind, placebo-controlled, multicentre study in 685 patients with histologically confirmed locally advanced or metastatic BTC and ECOG performance status of 0 or 1. Patients who developed recurrent disease more than 6 months after surgery and/or completion of adjuvant therapy were included. Patients must have had at least one target lesion by RECIST v1.1 and adequate organ and bone marrow function.

The study excluded patients with ampullary carcinoma, active or prior documented autoimmune or inflammatory disorders, HIV infection or active infections, including tuberculosis or hepatitis C or patients with current or prior use of immunosuppressive medication within 14 days before the first dose of IMFINZI.

Randomisation was stratified by disease status and primary tumour location.

Patients were randomised 1:1 to receive:

- Arm 1: IMFINZI 1500 mg administered intravenously on Day 1+ gemcitabine 1000 mg/m<sup>2</sup> and cisplatin 25 mg/m<sup>2</sup> (each administered on Days 1 and 8) every 3 weeks (21 days) for up to 8 cycles, followed by IMFINZI 1500 mg every 4 weeks as long as clinical benefit is observed or until unacceptable toxicity, or

- Arm 2: Placebo administered intravenously on Day 1+ gemcitabine 1000 mg/m<sup>2</sup> and cisplatin 25 mg/m<sup>2</sup> (each administered on Days 1 and 8) every 3 weeks (21 days) for up to 8 cycles, followed by placebo every 4 weeks as long as clinical benefit is observed or until unacceptable toxicity.

Tumour assessments were conducted every 6 weeks for the first 24 weeks after the date of randomisation, and then every 8 weeks until confirmed objective disease progression.

The primary endpoint of the study was OS and the key secondary endpoint was PFS. Other secondary endpoints were ORR, DoR and PRO. PFS, ORR and DoR were Investigator assessed according to RECIST v1.1.

The demographics and baseline disease characteristics were well balanced between the two study arms (341 patients in Arm 1 and 344 patients in Arm 2). Baseline demographics of the overall study population were as follows: male (50.4%), age <65 years (53.3%), white (37.2%), Asian (56.4%), black or African American (2.0%), other (4.2%), non-Hispanic or Latino (93.1%), ECOG PS 0 (49.1%), vs. PS 1 (50.9%), primary tumour location intrahepatic cholangiocarcinoma (55.9%), extrahepatic cholangiocarcinoma (19.1%) and gallbladder cancer (25.0%), disease status recurrent (19.1%) vs. initially unresectable (80.7%), metastatic (86.0%) vs. locally advanced (13.9%).

The study demonstrated a statistically significant and clinically meaningful improvement in OS and PFS at a pre-planned interim (primary) analysis. The results in OS were [HR=0.80, (95% CI: 0.66, 0.97), p=0.021] and in PFS [HR=0.75, (95% CI: 0.63, 0.89), p=0.001]. The maturity for OS was 61.9% and the maturity for PFS was 83.6%. Results from this analysis are presented in Table 13 and Figure 7.

An additional OS analysis was performed 6.5 months after the interim analysis with an OS maturity of 76.9%. The observed treatment effect was consistent with the interim analysis. The OS HR was 0.76 (95% CI: 0.64, 0.91) and median survival was 12.9 months (95% CI: 11.6, 14.1) for the IMFINZI + gemcitabine and cisplatin arm. Results from this analysis are presented in the Table 13 and Figure 7.

**Table 13. Efficacy Results for the TOPAZ-1 Study**

	Primary Analysis <sup>a</sup>		Follow up Analysis <sup>b</sup>	
	IMFINZI + gemcitabine and cisplatin (n=341)	Placebo + gemcitabine and cisplatin (n=344)	IMFINZI + gemcitabine and cisplatin (n=341)	Placebo + gemcitabine and cisplatin (n=344)
<b>OS</b>				
Number of deaths (%)	198 (58.1)	226 (65.7)	248 (72.7)	279 (81.1)
<b>Median OS (months)</b> <b>(95% CI)<sup>c</sup></b>	12.8 (11.1, 14)	11.5 (10.1, 12.5)	12.9 (11.6, 14.1)	11.3 (10.1, 12.5)
HR (95% CI) <sup>d</sup>	0.80 (0.66, 0.97)		0.76 (0.64, 0.91)	
<b>OS at 12 months (%)</b> <b>(95% CI)<sup>c</sup></b>	54.1 (48.4, 59.4)	48 (42.4, 53.4)	54.3 (48.8, 59.4)	47.1 (41.7, 52.3)
<b>OS at 18 months (%)</b> <b>(95% CI)<sup>c</sup></b>	35.1 (29.1, 41.2)	25.6 (19.9, 31.7)	34.8 (29.6, 40.0)	24.1 (19.6, 28.9)
<b>OS at 24 months (%)</b> <b>(95% CI)<sup>c</sup></b>	24.9 (17.9, 32.5)	10.4 (4.7, 18.8)	23.6 (18.7, 28.9)	11.5 (7.6, 16.2)
<b>PFS</b>				
Number of events (%)	276 (80.9)	297 (86.3)	NA	NA
<b>Median PFS (months)</b> <b>(95% CI)<sup>c</sup></b>	7.2 (6.7, 7.4)	5.7 (5.6, 6.7)	NA	NA
HR (95% CI) <sup>d</sup>	0.75 (0.63, 0.89)		NA	
p-value <sup>d,f</sup>	0.001		NA	
<b>PFS at 9 months (%)</b> <b>(95% CI)<sup>c</sup></b>	34.8 (29.6, 40.0)	24.6 (20.0, 29.5)	NA	NA

<b>PFS at 12 months (%) (95% CI)<sup>c</sup></b>	16.0 (12.0, 20.6)	6.6 (4.1, 9.9)	NA	NA
<b>ORRn (%)<sup>g</sup></b>	91 (26.7)	64 (18.7)	NA	NA
Complete Response n (%)	7 (2.1)	2 (0.6)	NA	NA
Partial Response n (%)	84 (24.6)	62 (18.1)	NA	NA
Odds ratio (95 % CI) <sup>h</sup>	1.60 (1.11, 2.31)		NA	NA
p-value <sup>h</sup>	0.011		NA	NA
<b>DoR<sup>g</sup></b>				
<b>Median DoR (months) (95% CI)<sup>c</sup></b>	6.4 (5.9, 8.1)	6.2 (4.4, 7.3)	NA	NA
<b>DoR at 9 months (%)<sup>c</sup></b>	32.6	25.3	NA	NA
<b>DoR at 12 months (%)<sup>c</sup></b>	26.1	15.0	NA	NA

<sup>a</sup> Final OS, PFS, ORR and DoR analysis at data cut-off 11 Aug 2021.

<sup>b</sup> Follow-up OS analysis at data cut-off 25 Feb 2022.

<sup>c</sup> Calculated using the Kaplan-Meier technique. CI for median derived based on Brookmeyer-Crowley method.

<sup>d</sup> The analysis for HR was performed using a stratified Cox proportional hazards model and 2-sided p-value is based on a stratified log-rank test, both are adjusted for disease status and primary tumor location.

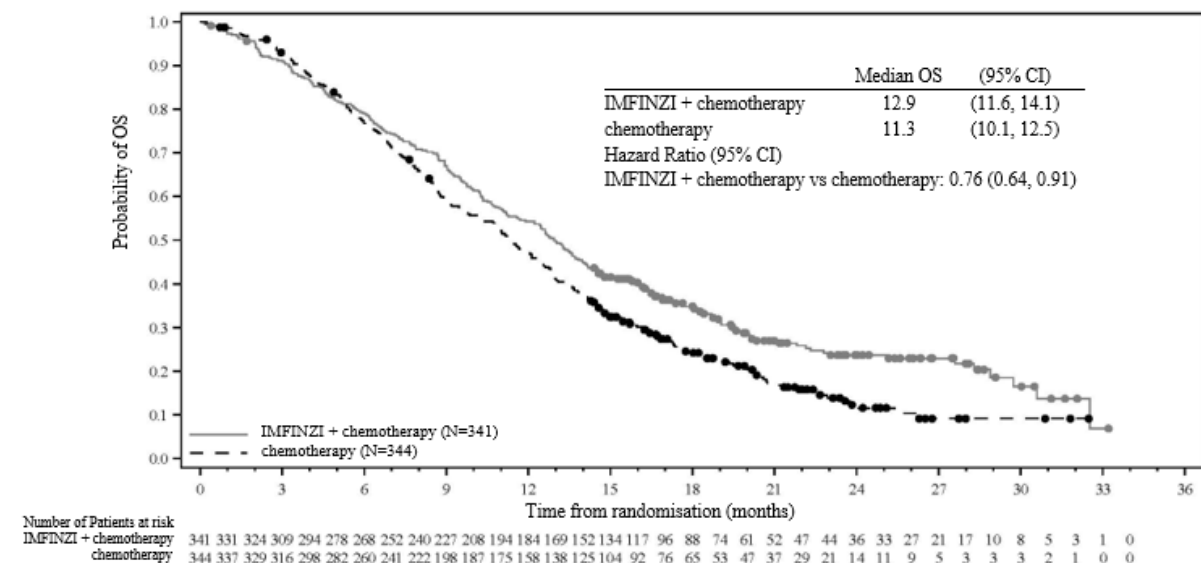
<sup>e</sup> p-value based on the results from the pre-planned interim (primary) analysis. Based on a Lan-DeMets alpha spending function with O'Brien Fleming type boundary for OS and the actual number of events observed, the boundary for declaring statistical significance was 0.03 for an 4.9% overall alpha (Lan and DeMets 1983).

<sup>f</sup> p-value based on the results from the pre-planned interim (primary) analysis. Based on a Lan-DeMets alpha spending function with Pocock type boundary and the actual number of events observed, the boundary for declaring statistical significance was 0.0481 for an 4.9% overall alpha (Lan and DeMets 1983).

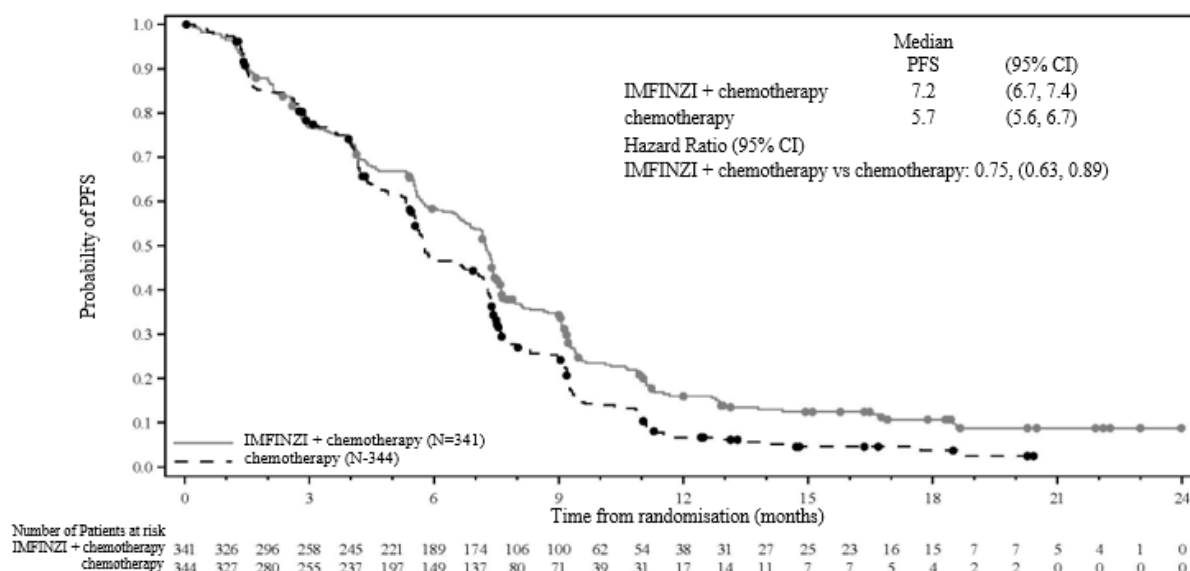
<sup>g</sup> Confirmed objective response by Investigator per RECIST 1.1. Based on patients with measurable disease at baseline IMFINZI + gemcitabine and cisplatin (n = 341), Placebo + gemcitabine and cisplatin (n = 343).

<sup>h</sup> The analysis was performed using a stratified CMH test with factors for disease status and tumor location. Nominal 2-sided p-value.

**Figure 7: Kaplan-Meier curve of OS (DCO: 25 Feb 2022)**



**Figure 8: Kaplan-Meier curve of PFS (DCO: 11 Aug 2021)**



### Subgroup analysis

The improvements in OS and PFS in favour of patients receiving IMFINZI + chemotherapy compared to those receiving placebo + chemotherapy, were consistently observed across the prespecified subgroups based on demographics, geographical region, primary tumour location, disease status, ECOG PS, and PD-L1 expression levels.

### Patient-Reported Outcomes

Patient-reported symptoms, function and global health status/QoL (GHS/QoL) were collected using the EORTC QLQ-C30 and its biliary tract cancer module (EORTC QLQ-BIL21). At baseline, patient-reported symptoms, functioning and GHS/QoL scores were comparable between the study arms. Time to deterioration and change from baseline analyses were consistent with no detriment in symptoms, function and GHS/QoL per EORTC QLQ-C30 and EORTC QLQ-BIL21 in the IMFINZI + chemotherapy group compared to the placebo + chemotherapy group.

### HCC - HIMALAYA Study

The efficacy of STRIDE was evaluated in the HIMALAYA study, a randomised, open-label, multicenter study in patients with confirmed uHCC who did not receive prior systemic treatment for HCC. The study included patients with BCLC Stage C or B (not eligible for locoregional therapy) and Child-Pugh Score Class A.

The study excluded patients with co-infection of viral hepatitis B and hepatitis C; active or prior documented GI bleeding within 12 months; ascites requiring non-pharmacologic intervention within 6 months; hepatic encephalopathy within 12 months before the start of treatment; active or prior documented autoimmune or inflammatory disorders.

Patients with esophageal varices were included except those with active or prior documented GI bleeding within 12 months prior to study entry.

Randomisation was stratified by macrovascular invasion (MVI) (yes vs. no), etiology of liver disease (confirmed hepatitis B virus vs. confirmed hepatitis C virus vs. others) and ECOG performance status (0 vs. 1).

The HIMALAYA study randomized 1171 patients 1:1:1 to receive:

- IMFINZI: durvalumab 1500 mg every 4 weeks
- STRIDE: tremelimumab 300 mg as a single priming dose + IMFINZI 1500 mg; followed by IMFINZI 1500 mg every 4 weeks
- S: Sorafenib 400 mg twice daily

Treatment continued as long as clinical benefit was observed or until unacceptable toxicity. Patients in all arms could continue to receive treatment after evidence of disease progression if, in the Investigator's opinion, they were benefiting from study drug and met all inclusion and exclusion criteria for treatment beyond progression. In addition, patients in the STRIDE arm who continued treatment beyond progression were allowed to be rechallenged once with an additional single dose of tremelimumab 300 mg after cycle five of IMFINZI. Of the 182 patients enrolled to the STRIDE arm who received IMFINZI beyond progression, the median OS was 19.5 months (95% CI: 15.4, 23.4). Of the 30 patients who were enrolled to the STRIDE arm who were rechallenged with tremelimumab, the median OS was 30.4 months (95% CI: 23.4, NR).

Tumour assessments were conducted every 8 weeks for the first 12 months and then every 12 weeks thereafter. Survival assessments were conducted every month for the first 3 months following treatment discontinuation and then every 2 months.

The primary endpoint was OS for STRIDE vs. S. The key secondary objective was OS for non-inferiority based on the comparison of IMFINZI vs. S. Key secondary endpoints were Investigator assessed PFS, ORR and DoR according to RECIST v1.1. PROs were also assessed.

The demographics and baseline disease characteristics were generally representative for patients with uHCC. The baseline demographics of the overall study population were as follows: male (83.7%), age <65 years (50.4%), white (44.6%), Asian (50.7%), black or African American (1.7%), other (2.3%), ECOG PS 0 (62.6%); Child-Pugh Class score A (99.5%), macrovascular invasion (25.2%), extrahepatic spread (53.4%), viral etiology; hepatitis B (30.6%), hepatitis C (27.2%), uninfected (42.2%).

The study demonstrated a statistically significant and clinically meaningful improvement in OS with STRIDE vs. S [HR=0.78 [95% CI 0.66, 0.92]; p=0.0035]. The study also met the key secondary objective of OS non-inferiority of IMFINZI to S with the upper limit of the 95.67% CI being below the pre-specified non-inferiority margin of 1.08. See Table 14 Figure 9 and Figure 10.

**Table 14. Efficacy Results for the HIMALAYA Study for STRIDE vs. S and IMFINZI vs. S**

	<b>STRIDE (n=393)</b>	<b>S (n=389)</b>	<b>IMFINZI (n=389)</b>
<b>Follow up duration</b>			
Median follow up	33.2	32.2	32.6
Range	(31.7–34.5)	(30.4–33.7)	(31.6–33.7)
<b>OS</b>			
Number of deaths (%)	262 (66.7)	293 (75.3)	280 (72.0)
Median OS (months) (95% CI)	16.4 (14.2-19.6)	13.8 (12.3-16.1)	16.6 (14.1-19.1)
HR (95% CI)	0.78 (0.66, 0.92)		-
p-value <sup>a</sup>	0.0035		-
HR (95% CI) <sup>b</sup>	-	0.86 (0.73, 1.02)	
<b>OS at 12 months (%) (95% CI)</b>	60.2 (55.2 - 64.9)	56.2 (51.0 - 61.0)	59.3 (54.2-64.0)
<b>OS at 18 months (%) (95% CI)</b>	48.7 (43.6-53.5)	41.5 (36.5-46.4)	47.4 (42.4-52.3)
<b>OS at 24 months (%) (95% CI)</b>	40.5 (35.6-45.3)	32.6 (27.9-37.4)	39.6 (34.8-44.5)
<b>OS at 36 months (%) (95% CI)</b>	30.7 (25.8-35.7)	20.2 (15.8-25.1)	24.7 (20.0-29.8)
p-value	0.0029		0.1926

Number of patients treated beyond progression	182	192	188
<b>PFS</b>			
Number of events (%)	335 (85.2)	327 (84.1)	345 (88.7)
<b>Median PFS (months) (95% CI)</b>	3.78 (3.68-5.32)	4.07 (3.75-5.49)	3.65 (3.19-3.75)
HR (95% CI)	0.90 (0.77 - 1.05)		-
p-value <sup>c</sup>	0.1625		-
HR (95% CI)	-	1.02 (0.88 - 1.19)	
p-value <sup>c</sup>	-	0.7736	
<b>ORR</b>			
<b>ORR n (%)<sup>c,d</sup></b>	79 (20.1)	20 (5.1)	66 (17.0)
Complete Response n (%)	12 (3.1)	0	6 (1.5)
Partial Response n (%)	67 (17.0)	20 (5.1)	60 (15.4)
Odds ratio 95% CI	4.69 (2.85, 8.04)		-
	-	3.8 (2.3, 6.6)	
p-value <sup>c</sup>	<0.0001		-
p-value <sup>c</sup>	-	<0.0001	
<b>DoR<sup>d</sup></b>			
<b>Median DoR (months)</b>	22.3	18.4	16.9
Sample size (n)	79	20	66
% with duration ≥6 months	82.3	78.9	81.8
% with duration ≥12 months	65.8	63.2	57.8

<sup>a</sup> Based on a Lan-DeMets alpha spending function with O'Brien Fleming type boundary and the actual number of events observed, the boundary for declaring statistical significance for STRIDE vs. S was 0.0398 for a 4.9% overall 2-sided 4.9% (Lan and DeMets 1983).

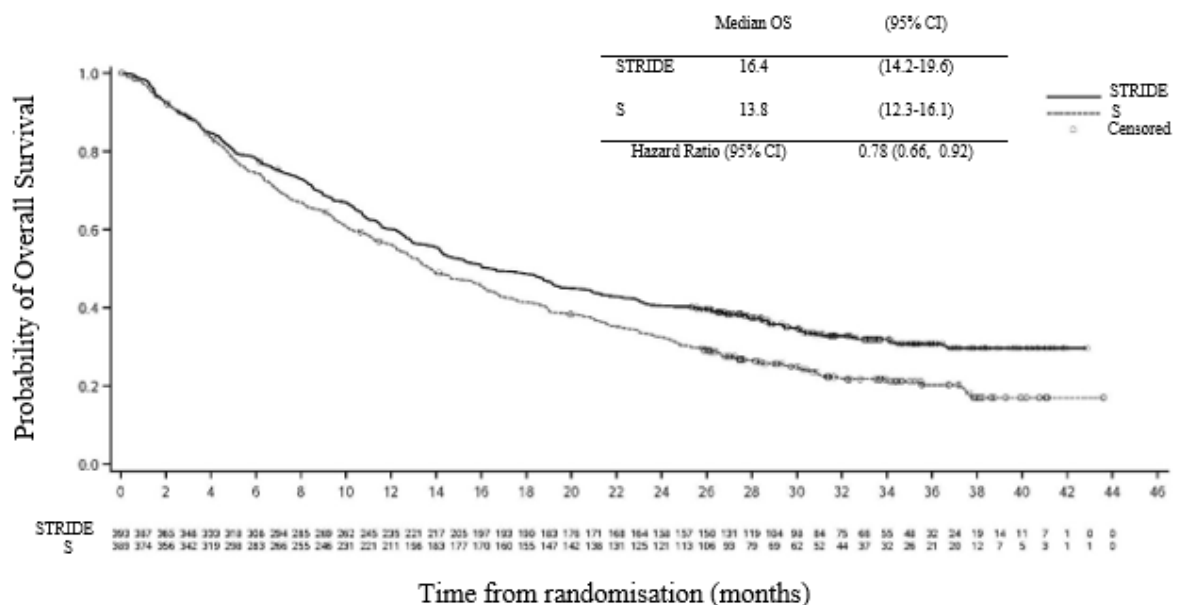
<sup>b</sup> Based on stratified Cox-model. Non-inferiority margin for HR (IMFINZI vs S) is 1.08 using a 95.67% confidence interval (alpha-level adjusted based on a Lan-DeMets alpha-spending function).

<sup>c</sup> Nominal p-value. PFS and ORR were not included in the Multiple Testing Procedure (MTP).

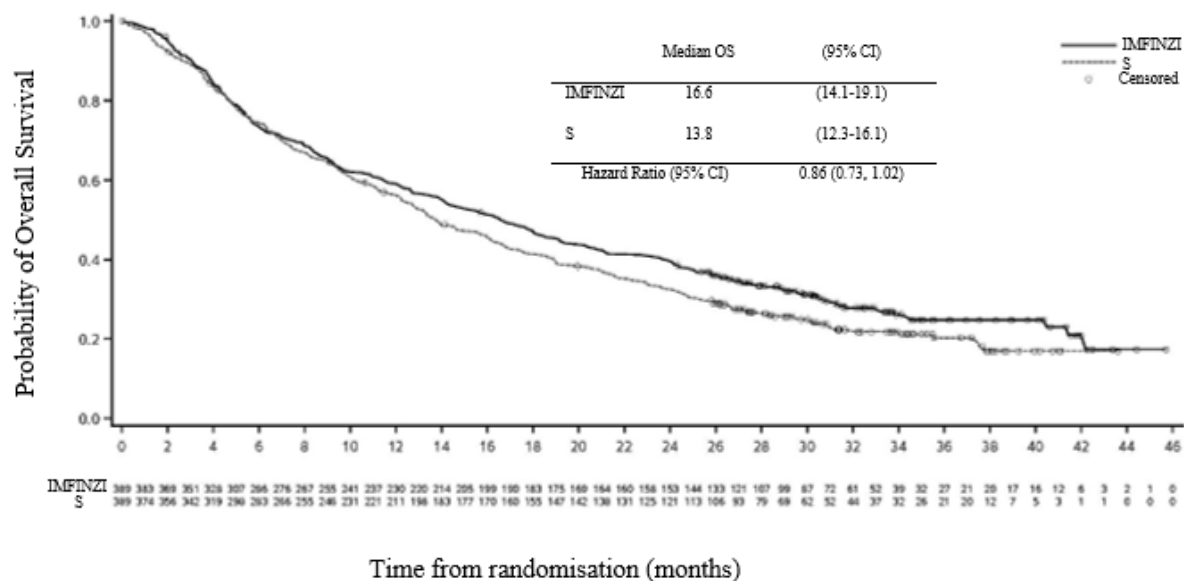
<sup>d</sup> Confirmed complete response.

NR=Not Reached, CI=Confidence Interval

**Figure 9. Kaplan-Meier curve of OS**



**Figure 10. Kaplan-Meier curve of OS**



*Patient reported outcomes*

Patient-reported symptoms, function and health-related quality of life (HRQoL) were collected using the EORTC QLQ-C30 and its hepatocellular carcinoma module (EORTC QLQ-HCC18). At baseline, patient-reported symptoms, functioning or HRQoL scores were comparable between the study arms.

*STRIDE vs. S*

Delay in time to deterioration of symptoms, functioning, and global health status/QoL:

STRIDE vs. S demonstrated a clinically meaningful improvement by delaying time to deterioration in a broad range of patient-reported symptoms, function, and global health status/QoL compared to S. Longer time to deterioration (median in months) was observed in the STRIDE arm compared to S for the following symptoms: Global Health Status (7.5 vs. 5.7 months, HR 0.76, p = 0.0306); physical functioning (12.9 vs. 7.4 months, HR 0.68; p = 0.0020), fatigue (7.4 vs. 5.4 months, HR 0.71; p = 0.0026), nausea (25.0 vs. 11.0 months, HR 0.65; p = 0.0033), appetite loss (12.6 vs. 6.9 months, HR 0.59; p < 0.0001), abdominal pain (16.8 vs. 8.9 months, HR 0.61; p = 0.0008) and abdominal swelling (20.9 vs. 11.1 months, HR 0.74; p = 0.0431).

Change from baseline in patient-reported symptoms (mixed model for repeated measures):

STRIDE improved patient-reported HRQoL functioning and diarrhoea by demonstrating a nominal difference and clinically meaningful mean change from baseline vs. S from randomisation until 8 months (Estimated mean difference at 8 months: -18.5 95% CI: -23.24, -13.84 and p-value: <0.0001).

Patient-reported outcome results should be interpreted in the context of the open-label study design.

*IMFINZI vs. S*

Delay in time to deterioration of symptoms, functioning and GHS/QoL:

Treatment with IMFINZI demonstrated a clinically meaningful delay in time to deterioration in a broad range of patient-reported symptoms, function and GHS/QoL compared with S. Longer median time to deterioration was observed in the IMFINZI arm compared to S for the following: EORTC QLQ-C30 appetite loss (11.1 vs. 6.9 months, HR=0.60; p<0.0001), fatigue (6.9 vs. 5.4 months, HR=0.75; p=0.0162), physical functioning (14.1 vs. 7.4 months, HR=0.66; p=0.0008) and GHS/QoL domain (7.4 vs. 5.7 months, HR=0.77; p=0.0300); and EORTC QLQ-HCC18 abdominal pain (14.1 vs. 8.9 months, HR=0.67; p=0.0022).

Change from baseline in patient-reported symptoms (mixed model for repeated measures):



Treatment with IMFINZI also demonstrated fewer patient-reported symptoms, better function and improved GHS/QoL burden over time as evidenced by the change from baseline scores compared with S.

Patient-reported outcome results should be interpreted in the context of the open-label study design.

### HCC – Study 22

The safety and efficacy of STRIDE was evaluated in Study 22, an open-label, multi-part, multicenter study in 75 immunotherapy naïve patients with uHCC who had progressed on, are intolerant to, or have refused sorafenib. The study included patients with BCLC Stage C or B (not eligible for locoregional therapy), ECOG performance status of 0 or 1 and Child-Pugh Score Class A.

The study excluded patients with co-infection of viral hepatitis B and hepatitis C; active or prior documented GI bleeding within 12 months; ascites requiring non-pharmacologic intervention within 6 months; hepatic encephalopathy within 12 months before the start of treatment; active or prior documented autoimmune or inflammatory disorders.

Treatment continued as long as clinical benefit was observed or until unacceptable toxicity. Patients who completed the assigned dosing cycles and were benefiting from study drug in the Investigator’s opinion and subsequently had evidence of disease progression during the IMFINZI monotherapy phase could be rechallenged with tremelimumab 300 mg.

Tumour assessments were conducted every 8 weeks.

The primary objective was safety and tolerability. Key secondary endpoints included OS, ORR and DoR. ORR, DoR and PFS were based on Investigator assessments and BICR according to RECIST 1.1.

The baseline demographics of the study population (STRIDE) were as follows: male (86.7%); age <65 years (45.3%), white (36.0%); Asian (58.7%); black or African American (5.3%); other (0%), ECOG PS 0 (61.3%), Child-Pugh Class/Score A/5 (68.0%), Child-Pugh Class/Score A/6 (30.7%), macrovascular invasion (21.3%); extrahepatic spread (70.7%), viral etiology; hepatitis B (36.0%), hepatitis C (28.0%), uninfected (36.0%); prior systemic therapy (73.3%).

Efficacy results are shown in Table 15.

**Table 15. Efficacy results for Study 22<sup>a</sup>**

	<b>STRIDE (n=75)</b>	<b>D (n=104)</b>
<b>ORR</b>		
<b>ORR n (%)<sup>b,c</sup></b>	18 (24.0)	12 (11.5)
95% CI	14.9, 35.3	6.1, 19.3
<b>DoR<sup>b</sup></b>		
<b>Median DoR (months) (95% CI)</b>	18.4 (5.6, 24.0)	15.0 (8.5, NR)
% with duration ≥6 months	71.8	83.3
% with duration ≥12 months	64.6	56.3
<b>OS</b>		
Number of deaths (%)	49 (65.3)	78 (75.0)
<b>Median OS (months) (95% CI)</b>	17.05 (10.6-22.8)	12.9 (8.7-16.8)
<b>OS at 12 months (%) (95% CI)</b>	57.6 (45.5-68.0)	50.4 (40.3-59.7)

Reference: US PI Doc ID-005220832 V2.0, CDS 17 Nov 2023 Doc ID-003664362 v32.0

<b>OS at 18 months (%)</b> <b>(95% CI)</b>	47.8 (35.9-58.7)	34.0 (24.9-43.3)
<b>OS at 24 months (%)</b> <b>(95% CI)</b>	38.3 (26.9-49.6)	26.2 (17.9-35.3)

<sup>a</sup> DCO of Final analysis: 6 Nov 2020.

<sup>b</sup> Confirmed by BICR per RECIST v1.1.

<sup>c</sup> Confirmed complete response.

NR=Not Reached, CI=Confidence Interval

### *Paediatric and adolescents*

Study D419EC00001 was a multi-centre, open-label dose finding and dose expansion study to evaluate the safety, preliminary efficacy and pharmacokinetics of IMFINZI in combination with tremelimumab followed by IMFINZI monotherapy, in paediatric patients with advanced malignant solid tumours (except primary central nervous system tumours) who had disease progression and for whom no standard of care treatment exists. The study enrolled 50 paediatric patients with an age range from 1 to 17 years with primary tumour categories: neuroblastoma, solid tumour and sarcoma. Patients received either IMFINZI 20 mg/kg in combination with tremelimumab 1 mg/kg or IMFINZI 30 mg/kg in combination with tremelimumab 1 mg/kg intravenously every 4 weeks for 4 cycles, followed by IMFINZI as monotherapy every 4 weeks. In the dose finding phase, IMFINZI and tremelimumab combination therapy was preceded by a single cycle of IMFINZI monotherapy; 8 patients in this phase however discontinued treatment prior to receiving tremelimumab.

## **5.2 Pharmacokinetic properties**

The pharmacokinetics (PK) of durvalumab as a single agent was studied in patients with solid tumors with doses ranging from 0.1 to 20 mg/kg administered once every two, three or four weeks.

The PK of durvalumab is similar when assessed as a single agent, in combination with chemotherapy, in combination with tremelimumab and platinum-based chemotherapy, and in combination with tremelimumab.

### Absorption:

PK exposure increased more than dose-proportionally (non-linear PK) at doses <3 mg/kg and dose proportionally (linear PK) at doses ≥ 3 mg/kg.

### Distribution:

Steady state was achieved at approximately 16 weeks. Based on population PK analysis that included patients in the dose range of 10 mg/kg Q2W, 15 mg/kg Q3W and 20 mg/kg Q4W, the geometric mean, steady state volume of distribution (V<sub>ss</sub>) was 5.64 L.

### Metabolism:

The metabolic pathway of durvalumab has not been characterised. Durvalumab is expected to be degraded into small peptides and amino acids via catabolic pathways in the same manner as endogenous IgG.

### Elimination:

Durvalumab clearance (CL) decreased over time resulting in a geometric mean steady state clearance (CL<sub>ss</sub>) of 8.16 mL/h at Day 365; the decrease in CL<sub>ss</sub> was not considered clinically relevant. The terminal half-life (t<sub>1/2</sub>), based on baseline CL, was approximately 18 days. The primary elimination pathways of durvalumab are protein catabolism via reticuloendothelial system or target mediated disposition.

### Special Populations

As assessed by population PK analysis, Age (19–96 years), body weight (314-149 Kg), gender, positive anti-drug antibody (ADA) status, albumin levels, LDH levels, creatinine levels, soluble PD-

Reference: US PI Doc ID-005220832 V2.0, CDS 17 Nov 2023 Doc ID-003664362 v32.0

L1, tumor type, race, or ECOG/WHO status had no clinically significant effect on the pharmacokinetics of durvalumab.

#### *Paediatric and adolescents*

The PK of durvalumab in combination with tremelimumab was evaluated in a study of 50 paediatric patients with an age range from 1 to 17 years, in study D419EC00001. Patients received either durvalumab 20 mg/kg in combination with tremelimumab 1 mg/kg or durvalumab 30 mg/kg in combination with tremelimumab 1 mg/kg intravenously every 4 weeks for 4 cycles, followed by durvalumab as monotherapy every 4 weeks. Based on population PK analysis, durvalumab systemic exposure in paediatric patients  $\geq 35$ kg receiving durvalumab 20 mg/kg every 4 weeks was similar to exposure in adults receiving durvalumab 20 mg/kg every 4 weeks, whereas in paediatric patients ( $\geq 35$ kg) receiving durvalumab 30mg/kg every 4 weeks, exposure was approximately 1.5 fold higher compared to exposure in adults receiving durvalumab 20 mg/kg every 4 weeks. In paediatric patients  $< 35$ kg receiving durvalumab 30 mg/kg every 4 weeks, the systemic exposure was similar to exposure in adults receiving durvalumab 20 mg/kg every 4 weeks.

#### Elderly

No dose adjustment is required for elderly patients ( $\geq 65$  years of age). Of the 191 patients with urothelial carcinoma (primary efficacy population) treated with IMFINZI, 118 patients were 65 years or older. No overall clinically meaningful differences in safety or efficacy were reported between patients  $\geq 65$  years of age and younger patients.

Of the 476 patients with locally advanced, unresectable NSCLC (primary efficacy population) treated with IMFINZI, 215 patients were 65 years or older. No overall clinically meaningful differences in safety were reported between patients  $\geq 65$  years of age and younger patients.

Of the 401 patients with resectable NSCLC treated with IMFINZI in combination with chemotherapy in the AEGEAN study, 209 (52%) patients were 65 years or older and 49 (12%) patients were 75 years or older. There were no overall clinically meaningful differences in safety or effectiveness between patients  $\geq 65$  years of age and younger patients.

Of the 265 patients with ES-SCLC treated with IMFINZI in combination with chemotherapy, 101 (38%) patients were 65 years or older. There were no overall clinically meaningful differences in safety or effectiveness between patients  $\geq 65$  years of age and younger patients.

Of the 338 patients with metastatic NSCLC treated with IMFINZI in combination with tremelimumab and platinum-based chemotherapy, 147 (43%) patients were 65 years or older. There were no overall clinically meaningful differences in safety or effectiveness between patients  $\geq 65$  years of age and younger patients.

Of the 462 patients with uHCC treated with STRIDE, 173 (37.4%) patients were 65 years or older and 63 (13.6%) patients were 75 years or older. There were no clinically meaningful differences in safety or efficacy between patients 65 years or older and younger patients.

Of the 338 patients with BTC treated with IMFINZI in combination with chemotherapy, 158 (46.7%) patients were 65 years or older. There were no overall clinically meaningful differences in safety or effectiveness between patients  $\geq 65$  years of age and younger patients.

#### Renal insufficiency

As assessed by population PK analysis, mild renal impairment (creatinine clearance (CRCL) 60 to 89 mL/min) and moderate renal impairment (creatinine clearance (CRCL) 30 to 59 mL/min) had no clinically significant effect on the pharmacokinetics of Durvalumab. The effect of severe renal impairment (CRCL 15 to 29 mL/min) on the pharmacokinetics of durvalumab is unknown.

#### Hepatic insufficiency

As assessed by population PK analysis, mild hepatic impairment (bilirubin  $\leq$  ULN and AST  $>$  ULN or bilirubin  $>1.0$  to  $1.5 \times$  ULN and any AST) had no clinically significant effect on the pharmacokinetics

of Durvalumab. The effect of moderate hepatic impairment (bilirubin >1.5 to 3 x ULN and any AST) or severe hepatic impairment (bilirubin >3.0 x ULN and any AST) on the pharmacokinetics of durvalumab is unknown.

### **5.3 Preclinical safety data**

#### Carcinogenicity and mutagenicity

The carcinogenic and genotoxic potential of durvalumab has not been evaluated.

#### Reproductive toxicology

There are no data on the potential effects of durvalumab on fertility in humans. As reported in the literature, the PD-1/PD-L1 pathway plays a central role in preserving pregnancy by maintaining maternal immune tolerance to the fetus, and in mouse allogeneic pregnancy models disruption of PD-L1 signalling was shown to result in an increase in fetal loss. In reproduction studies in cynomolgus monkeys, administration of durvalumab from the confirmation of pregnancy through delivery at exposure levels approximately 6 to 20 times higher than those observed at the clinical dose of 10 mg/kg of durvalumab (based on AUC) was associated with premature delivery, fetal loss (abortion and stillbirth) and an increase in neonatal deaths compared to concurrent control.

#### Animal toxicology and/or pharmacology

Repeat dose toxicity studies in sexually mature cynomolgus monkeys with durvalumab of up to 3 months duration were not associated with any adverse effects that were considered of relevance to humans.

## **6. PHARMACEUTICAL PARTICULARS**

### **6.1 List of excipients**

Histidine  
Histidine hydrochloride monohydrate  
Trehalose dihydrate  
Polysorbate 80  
Water for injections

### **6.2 Incompatibilities**

In the absence of compatibility studies, this medicinal product must not be mixed with other medicinal products.

### **6.3 Shelf life**

The drug product may not be administered after the EXP date printed on the carton.

### **6.4 Special precautions for storage**

Store in a refrigerator (2 °C – 8 °C).

Do not freeze.

Store in the original package in order to protect from light.

### **6.5 Nature and contents of container**

Two pack sizes of IMFINZI are available:

- 2.4 mL (a total of 120 mg durvalumab) concentrate in a Type 1 glass vial with an elastomeric stopper and a gray flip-off aluminium seal. Pack size of 1 vial.

- 10 mL (a total of 500 mg durvalumab) concentrate in a Type 1 glass vial with an elastomeric stopper and a white flip-off aluminium seal. Pack size of 1 vial.

Not all pack sizes may be marketed.

## 6.6 Special precautions for disposal and other handling

IMFINZI does not contain a preservative. Administer infusion solution immediately once prepared. If infusion solution is not administered immediately and it needs to be stored, follow the below recommendations:

Chemical and physical stability of the prepared solution for infusion, in the IV bag, has been demonstrated for up to 30 days at 2°C to 8°C and for up to 24 hours at room temperature (up to 25°C) from the time of preparation.

From a microbiological point of view, the prepared solution for infusion, in the IV bag, should be used immediately. If not used immediately, post-dilution storage times and conditions prior to use are the responsibility of the user and the product may be stored for a maximum of 30 days at 2°C to 8°C (36°F to 46°F) or 12 hours at room temperature. If dilution has taken place in controlled and validated aseptic conditions, the product may be stored for the time defined by the chemical and physical stability described above.

### Preparation of solution

IMFINZI is supplied as a single-dose vial and does not contain any preservatives, aseptic technique must be observed.

- Visually inspect the medicinal product for particulate matter and discolouration. IMFINZI is clear to opalescent, colourless to slightly yellow solution. Discard the vial if the solution is cloudy, discoloured or visible particles are observed. Do not shake the vial.
- Withdraw the required volume from the vial(s) of IMFINZI and transfer into an IV bag containing sodium chloride 9 mg/mL (0.9%) solution for injection, or glucose 50 mg/mL (5%) solution for injection. Mix diluted solution by gentle inversion. The final concentration of the diluted solution should be between 1 mg/mL and 15 mg/mL. Do not freeze or shake the solution.
- Care must be taken to ensure the sterility of prepared solutions.
- Do not re-enter the vial after withdrawal of drug; only administer one dose per vial.
- Discard any unused portion left in the vial.

### Administration

- Administer the infusion solution intravenously over 60 minutes through an intravenous line containing a sterile, low-protein binding 0.2 or 0.22 micron in-line filter.
- Do not co-administer other medicinal products through the same infusion line.

Any unused medicinal product or waste material should be disposed of in accordance with local requirements.

## 7. MARKETING AUTHORISATION HOLDER

AstraZeneca (Thailand) Ltd., Bangkok, Thailand

**8. MARKETING AUTHORISATION NUMBER(S)**

1C 15041/62 (NB)

**9. DATE OF FIRST AUTHORISATION/RENEWAL OF THE AUTHORISATION**

3 May 2019

**10. DATE OF REVISION OF THE TEXT**

July 2024