

Supplement Tables

Table 1 Main GPCR families implicated in tumor biology

| GPCR family (class) | Representative GPCR (example) | Representative ligand | Tumor-related physiological functions |
|--|-------------------------------|--|---|
| Class A – Chemokine receptors | CXCR4 | CXCL12 (SDF-1 α) | Promotes tumor cell migration, invasion and angiogenesis; facilitates metastasis to distant organs ^[1] |
| Class A – Lysophospholipid receptors | LPAR1 (LPA receptor) | Lysophosphatidic acid (LPA) | Stimulates proliferation, survival and motility of cancer cells; remodels tumor micro-environment and immune response ^[2] |
| Class A – Endothelin receptors | EDNRA | Endothelin-1 (ET-1) | Drives vasoconstriction, angiogenesis and epithelial-to-mesenchymal transition (EMT), enhancing invasiveness ^[3] ^[4] |
| Class A – Prostanoid receptors | PTGER2 (EP2) | Prostaglandin E ₂ (PGE ₂) | Activates cAMP/PKA signaling, supporting cell proliferation, immune evasion and angiogenesis ^[5] ^[6] |
| Class A – Orphan GPCRs (GPR35) | GPR35 | Kynurenic acid (and other endogenous metabolites) | Modulates tumor-associated inflammation and cell migration; over-expressed in gastric, breast, colon and NSCLC ^[7] ^[8] ^[9] ^[10] |
| Class A – Orphan GPCRs (GPR55) | GPR55 | Lysophosphatidylinositol (LPI) | Enhances proliferation and metastasis in several cancers (e.g., ovarian), while showing context-dependent anti-proliferative effects in cholangiocarcinoma ^[11] |
| Class A – OGR1 subfamily (GPR4) | GPR4 | Extracellular protons (acidic pH) | Senses tumor-associated acidosis, promoting angiogenesis and tumor growth ^[12] ^[13] |
| Class B – Secretin family | VIPR1 (VPAC1) | Vasoactive intestinal peptide (VIP) | Stimulates cAMP signaling, supporting tumor cell survival and immune modulation ^[14] ^[15] |
| Class C – Metabotropic glutamate receptors | GRM1 | Glutamate | Drives MAPK/ERK activation, leading to proliferation and metastasis in melanoma and breast cancer ^[16] ^[17] |
| Adhesion GPCRs | GPR56 (ADGRG1) | Collagen III (and other extracellular matrix proteins) | Regulates cell adhesion, migration and angiogenesis; implicated in glioma and melanoma progression ^[18] ^[19] |
| Adhesion GPCRs | GPR124 | Unidentified extracellular ligands (e.g., VEGF-A) | Promotes angiogenic sprouting and blood-brain barrier formation, facilitating glioma invasion ^[20] |

**Table 2 – Advanced GPCR-targeted antitumor agents in clinical development
(2025)**

| Drug (generic) | GPCR target & mechanism of action | Primary therapeutic indication (oncology) | Clinical trial phase* |
|--|---|---|--|
| Talquetamab (bispecific antibody) | Binds GPRC5D on myeloma cells and CD3 on T cells → T-cell-mediated cytotoxicity[21] | Relapsed/refractory multiple myeloma (RRMM) | Phase I/II (MonumenTAL-1, pivotal) ^[22] |
| Motixafortide (BL-8040) | Peptide antagonist of CXCR4 → blocks CXCL12-CXCR4 axis, mobilises immune cells into tumor micro-environment | Metastatic pancreatic ductal adenocarcinoma (PDAC) in combination with pembrolizumab ± chemotherapy | Phase II (COMBAT/KEYNOTE-202) ^[23] |
| Plerixafor (AMD3100) | Small-molecule CXCR4 antagonist → disrupts CXCL12-CXCR4 signaling, enhances immune infiltration | Metastatic PDAC (CXCR4-high) combined with pembrolizumab (BL-8040 trial) | Phase II (BL-8040 + pembrolizumab) ^[24] |
| Navarixin (AZ-D281) | Small-molecule CXCR2 antagonist → allosteric inhibition of CXCR2, reduces neutrophil-mediated tumor support | PDAC (gemcitabine-resistant) – combination with gemcitabine | Phase I/II (early-stage oncology) ^[25] |
| BMS-813160 (dual CCR2/CCR5 antagonist) | Dual antagonism of CCR2 and CCR5 → blocks CCL2/CCR2 and CCL5/CCR5 chemokine pathways that promote tumor-associated macrophage recruitment | Hepatocellular carcinoma (high-risk NASH-related) and solid tumours under investigation | Phase I (dose-escalation) ^[26] |

Table 3. NSCLC- NSCLC-associated GPCRs

| GPCRs | Class | Integration of gene expression from cancer and healthy samples | Cognate Ligands | Roles | Reference |
|---|---------|--|---|--|------------------------------------|
| E prostanoïd (EP) receptors | Class A | Up/ down | PGE2 | mediate activation of MAPK/ERK-induced cellular proliferation, invasion | [27] |
| C-X-C chemokine receptor 2 (CXCR2) | Class A | UP | CXCL1, CXCL2, CXCL3, CXCL5, CXCL7 | Promote cell proliferation, migration, and invasion and apoptosis | [28] [29] |
| GPR78 | Class A | UP | orphan GPCR | Promote cell migration and metastasis | [30] |
| Protease-activated receptor 2 (PAR2) | Class A | UP | trypsin, tryptase, coagulation factor Xa (FXa), tissue factor (TF)-factor VIIa (FVIIa) complex and testisin | Promote proliferation and migration of lung cancer cells; anti-apoptosis | [31] [32] [33] [34] [35] [36] |
| C-X-C chemokine receptor 4 (CXCR4) | Class A | UP | CXCL12 | Promote motility, invasion and metastasis | [37] [38] [39] [40] [41] [42] [43] |
| G-protein coupled receptor family C group 5 member A (GPRC5A) | Class C | DOWN | orphan GPCR | Reduce tumor differentiation, inflammation and tumorigenesis | [44] [45] [46] [47] [48] [49] |
| Somatostatin receptor type 2 (SSTR2) | Class A | DOWN | acid polypeptide, somatostatin, | induces cell cycle arrest, cancer cell apoptosis, cell invasion and restores gap junctions | [50] [51] |

Table 4. GPCR-based treatments in lung cancer ((Created with GPCRdb).

| Drug | Gene | Protein | Receptor family | Ligand type | Class | Phase | Association score |
|----------------|-------|------------------|------------------------|----------------------|-------|-------|-------------------|
| ILOPROST | PI2R | IP receptor | Prostanoid receptors | Lipid receptors | A | II | 0.074 |
| Zibotentan | EDNRA | ETA receptor | Endothelin receptors | Peptide receptors | A | II | 0.08 |
| Mogamulizu mab | CCR4 | CCR4 | Chemokine receptors | Protein receptors | A | I | 0.104 |
| FLX475 | CCR4 | CCR4 | Chemokine receptors | Protein receptors | A | II | 0.104 |
| Anamorelin | GHSR | Ghrelin receptor | Ghrelin receptors | Peptide receptors | A | IV | 0.076 |
| Grapiprant | PE2R4 | EP4 receptor | Prostanoid receptors | Lipid receptors | A | I | 0.024 |
| ONO-4578 | PE2R4 | EP4 receptor | Prostanoid receptors | Lipid receptors | A | I | 0.024 |
| PBF-509 | AA2AR | A2A receptor | Adenosine receptors | Nucleotide receptors | A | II | 0.12 |
| AB928 | AA2AR | A2A receptor | Adenosine receptors | Nucleotide receptors | A | II | 0.12 |
| AB928 | AA2BR | A2B receptor | Adenosine receptors | Nucleotide receptors | A | II | 0.109 |
| SX-682 | CXCR1 | CXCR1 | Chemokine receptors | Protein receptors | A | II | 0.109 |
| SX-682 | CXCR2 | CXCR2 | Chemokine receptors | Protein receptors | A | II | 0.108 |
| TT-816 | CNR2 | CB2 receptor | Cannabinoid receptors | Lipid receptors | A | II | 0.045 |
| Taladegib | SMO | SMO | Frizzled | Protein receptors | F | II | 0.299 |
| Vismodegib | SMO | SMO | Frizzled | Protein receptors | F | II | 0.299 |
| PASIREOTI DE | SSR1 | SST1 receptor | Somatostatin receptors | Peptide receptors | A | II | 0.076 |
| PASIREOTI DE | SSR2 | SST2 receptor | Somatostatin receptors | Peptide receptors | A | II | 0.088 |
| PASIREOTI DE | SSR3 | SST3 receptor | Somatostatin receptors | Peptide receptors | A | II | 0.074 |
| PASIREOTI DE | SSR5 | SST5 receptor | Somatostatin receptors | Peptide receptors | A | II | 0.075 |

Table 5 Clinical trials of anti-cancer drugs targeting GPCR
(Data source:<https://clinicaltrials.gov/>)

| Study Title | Drug | Serious Adverse Events | | | Other Adverse Events | | |
|--|----------|---|---------------------------------|--------------------------------|--|---------------------------------|--------------------------------|
| Iloprost in Preventing Lung Cancer in Patients at High Risk for This Disease | ILOPROST | arm/group Title | Iloprost Affected / at Risk (%) | Placebo Affected / at Risk (%) | arm/group Title | Iloprost Affected / at Risk (%) | Placebo Affected / at Risk (%) |
| | | Total | 3/75 (4.00%) | 6/77 (7.79%) | Total | 52/75 (69.33%) | 32/77 (41.56%) |
| | | General disorders | | | Gastrointestinal disorders | | |
| | | Hospitalization†[1] | 3/75 (4.00%) | 4/77 (5.19%) | Nausea† | 12/75 (16.00%) | 6/77 (7.79%) |
| | | Death†[2] | 0/75 (0.00%) | 1/77 (1.30%) | General disorders | | |
| | | Nervous system disorders | | | Pain - Other† | 12/75 (16.00%) | 6/77 (7.79%) |
| | | CVA Stroke †[3] | 0/75 (0.00%) | 1/77 (1.30%) | Fatigue† | 8/75 (10.67%) | 2/77 (2.60%) |
| | | † Indicates events were collected by systematic assessment [1] SAE(Serious Adverse Event) was reported on subjects who were hospitalized. None of these subjects had > Grade 3 toxicities reported, and the hospitalizations were not attributed to either the drug or placebo. [2] Subject's death was reported as an SAE. The death was not attributed to being on the clinical trial. The subject was on a placebo [3] Patient suffered a stroke. Patient was on the Placebo | | | Investigations | | |
| | | | | | Metabolic/Laboratory - Other† | 3/75 (4.00%) | 6/77 (7.79%) |
| | | | | | Musculoskeletal and connective tissue disorders | | |
| | | | | | Myalgia (muscle pain)† | 13/75 (17.33%) | 1/77 (1.30%) |
| | | | | | Nervous system disorders | | |
| | | | | | Headache† | 40/75 (53.33%) | 17/77 (22.08%) |
| | | | | | Neuropathic pain† | 7/75 (9.33%) | 1/77 (1.30%) |
| | | | | | Vascular disorders | | |
| | | | | | Flushing† | 18/75 (24.00%) | 6/77 (7.79%) |
| | | | | | † Indicates events were collected by systematic assessment | | |

| Study Title | Drug | Serious Adverse Events | | | Other Adverse Events | | |
|---|------------|---|------------------------|------------------------|--|------------------------|------------------------|
| ZD4054 (Zibotentan) Phase II Non-Small Cell Lung Cancer Study | zibotentan | arm/group Title | placebo+ pemetrexed | ZD4054+ pemetrexed | arm/group Title | Placebo+ pemetrexed | ZD4054+ pemetrexed |
| | | | Affected / at Risk (%) | Affected / at Risk (%) | | Affected / at Risk (%) | Affected / at Risk (%) |
| | | Total | 7/30 (23.33%) | 4/36 (11.11%) | Total | 22/30 (73.33%) | 20/36 (55.56%) |
| | | Blood and lymphatic system disorders | | | Blood and lymphatic system disorders | | |
| | | Anaemia†1 | 1/30 (3.33%) | 0/36 (0.00%) | Anaemia†1 | 8/30 (26.67%) | 7/36 (19.44%) |
| | | Febrile Bone Marrow Aplasia†1 | 1/30 (3.33%) | 0/36 (0.00%) | Neutropenia†1 | 5/30 (16.67%) | 1/36 (2.78%) |
| | | Pancytopenia†1 | 0/30 (0.00%) | 1/36 (2.78%) | Leukopenia†1 | 2/30 (6.67%) | 0/36 (0.00%) |
| | | Cardiac disorders | | | Gastrointestinal disorders | | |
| | | Right Ventricular Failure†1 | 1/30 (3.33%) | 0/36 (0.00%) | Nausea†1 | 2/30 (6.67%) | 5/36 (13.89%) |
| | | Gastrointestinal disorders | | | Constipation†1 | 2/30 (6.67%) | 1/36 (2.78%) |
| | | Pancreatitis†1 | 1/30 (3.33%) | 0/36 (0.00%) | Vomiting†1 | 2/30 (6.67%) | 2/36 (5.56%) |
| | | Upper Gastrointestinal Haemorrhage†1 | 1/30 (3.33%) | 0/36 (0.00%) | General disorders | | |
| | | General disorders | | | Oedema Peripheral†1 | 1/30 (3.33%) | 4/36 (11.11%) |
| | | Adverse Drug Reaction†1 | 1/30 (3.33%) | 0/36 (0.00%) | Fatigue†1 | 1/30 (3.33%) | 2/36 (5.56%) |
| | | Asthenia†1 | 1/30 (3.33%) | 0/36 (0.00%) | Hepatobiliary disorders | | |
| | | Infections and infestations | | | Hypertransaminasaemia †1 | 2/30 (6.67%) | 0/36 (0.00%) |
| | | Erysipelas†1 | 0/30 (0.00%) | 1/36 (2.78%) | Infections and infestations | | |
| | | Lung Infection†1 | 0/30 (0.00%) | 1/36 (2.78%) | Bacterial Infection†1 | 2/30 (6.67%) | 0/36 (0.00%) |
| | | Neoplasms benign, malignant and unspecified (incl cysts and polyps) | | | Body Temperature Increased†1 | 3/30 (10.00%) | 2/36 (5.56%) |
| | | Metastases To Central Nervous System†1 | 1/30 (3.33%) | 0/36 (0.00%) | Brain Natriuretic Peptide Increased†1 | 0/30 (0.00%) | 3/36 (8.33%) |
| | | Renal and urinary disorders | | | Weight Decreased†1 | 3/30 (10.00%) | 3/36 (8.33%) |
| | | Renal Failure†1 | 1/30 (3.33%) | 0/36 (0.00%) | Alanine Aminotransferase Increased†1 | 2/30 (6.67%) | 2/36 (5.56%) |
| | | Respiratory, thoracic and mediastinal disorders | | | Aspartate Aminotransferase Increased†1 | 1/30 (3.33%) | 2/36 (5.56%) |

| Study Title | Drug | Serious Adverse Events | | | Other Adverse Events | | |
|---|------------|--|-----------------|-----------------|---|------------------|-----------------|
| ZD4054 (Zibotentan) Phase II Non-Small Cell Lung Cancer Study | zibotentan | Dyspnoea†1 | 0/30 (0.00%) | 1/36 (2.78%) | Metabolism and nutrition disorders | | |
| | | † Indicates events were collected by systematic assessment 1 Term from vocabulary, MedDRA 12.1 | | | Decreased Appetite†1 | 1/30 (3.33%) | 2/36 (5.56%) |
| | | | | | Hypokalaemia†1 | 2/30 (6.67%) | 0/36 (0.00%) |
| | | | | | Musculoskeletal and connective tissue disorders | | |
| | | | | | Musculoskeletal Pain†1 | 3/30 (10.00%) | 0/36 (0.00%) |
| | | | | | Back Pain†1 | 2/30 (6.67%) | 1/36 (2.78%) |
| | | | | | Nervous system disorders | | |
| | | | | | Headache†1 | 1/30 (3.33%) | 3/36 (8.33%) |
| | | | | | Psychiatric disorders | | |
| | | | | | Anxiety†1 | 2/30 (6.67%) | 0/36 (0.00%) |
| | | | | | Insomnia†1 | 2/30 (6.67%) | 0/36 (0.00%) |
| | | | | | Respiratory, thoracic and mediastinal disorders | | |
| | | | | | Cough†1 | 0/30 (0.00%) | 2/36 (5.56%) |
| | | | | | Skin and subcutaneous tissue disorders | | |
| | | | | | Rash†1 | 1/30 (3.33%) | 3/36 (8.33%) |
| | | | | | Alopecia†1 | 2/30 (6.67%) | 2/36 (5.56%) |
| | | | | | †Indicates events were collected by systematic assessment 1 Term from vocabulary, MedDRA 12.1 | | |
| | | Lung Infection†1 | 0/30 (0.00%) | 1/36 (2.78%) | Bacterial Infection†1 | 2/30 (6.67%) | 0/36 (0.00%) |
| | | Neoplasms benign, malignant and unspecified (incl cysts and polyps) | | | Body Temperature Increased†1 | 3/30 (10.00%) | 2/36 (5.56%) |
| | | Metastases To Central Nervous System†1 | 1/30 (3.33%) | 0/36 (0.00%) | Brain Natriuretic Peptide Increased†1 | 0/30 (0.00%) | 3/36 (8.33%) |
| | | Renal and urinary disorders | | | Weight Decreased†1 | 3/30 (10.00%) | 3/36 (8.33%) |
| | | Renal Failure†1 | 1/30 (3.33%) | 0/36 (0.00%) | Alanine Aminotransferase Increased†1 | 2/30 (6.67%) | 2/36 (5.56%) |
| | | Respiratory, thoracic and mediastinal disorders | | | Aspartate Aminotransferase Increased†1 | 1/30 (3.33%) | 2/36 (5.56%) |
| | | Dyspnoea†1 | 0/30 (0.00%) | 1/36 (2.78%) | Metabolism and nutrition disorders | | |

| Study Title | Drug | Serious Adverse Events | Other Adverse Events | | |
|---|------------|---|---|-----------------|-----------------|
| ZD4054 (Zibotentan) Phase II Non-Small Cell Lung Cancer Study | zibotentan | † Indicates events were collected by systematic assessment 1 Term from vocabulary, MedDRA 12.1 | Decreased Appetite†1 | 1/30 (3.33%) | 2/36 (5.56%) |
| | | | Hypokalaemia†1 | 2/30 (6.67%) | 0/36 (0.00%) |
| | | | Musculoskeletal and connective tissue disorders | | |
| | | | Musculoskeletal Pain†1 | 3/30 (10.00%) | 0/36 (0.00%) |
| | | | Back Pain†1 | 2/30 (6.67%) | 1/36 (2.78%) |
| | | | Nervous system disorders | | |
| | | | Headache†1 | 1/30 (3.33%) | 3/36 (8.33%) |
| | | | Psychiatric disorders | | |
| | | | Anxiety†1 | 2/30 (6.67%) | 0/36 (0.00%) |
| | | | Insomnia†1 | 2/30 (6.67%) | 0/36 (0.00%) |
| | | | Respiratory, thoracic and mediastinal disorders | | |
| | | | Cough†1 | 0/30 (0.00%) | 2/36 (5.56%) |
| | | | Skin and subcutaneous tissue disorders | | |
| | | | Rash†1 | 1/30 (3.33%) | 3/36 (8.33%) |
| | | | Alopecia†1 | 2/30 (6.67%) | 2/36 (5.56%) |
| | | | † Indicates events were collected by systematic assessment 1 Term from vocabulary, MedDRA 12.1 | | |

| Study Title | Drug | Serious Adverse Events | | | Other Adverse Events | | |
|--|---------------|---|---------------------------|---|--------------------------------------|---------------------------|--|
| Study of Mogamulizumab + Docetaxel in Subjects With Non-small Cell Lung Cancer | mogamulizumab | arm/group Title | Mogamulizumab + Docetaxel | arm/group Title | arm/group Title | Mogamulizumab + Docetaxel | |
| | | | Affected / at Risk (%) | | | Affected / at Risk (%) | |
| | | Total | 6/13 (46.15%) | Total | Total | 12/13 (92.31%) | |
| | | Blood and lymphatic system disorders | | Blood and lymphatic system disorders | Blood and lymphatic system disorders | | |
| | | Febrile neutropenia | 1/13 (7.69%) | Febrile neutropenia | Neutrophil count decreased | 4/13 (30.77%) | |
| | | Cardiac disorders | | Cardiac disorders | Neutropenia | 2/13 (15.38%) | |
| | | Acute myocardial infarction | 1/13 (7.69%) | Acute myocardial infarction | Anaemia | 1/13 (7.69%) | |
| | | Atrial fibrillation | 1/13 (7.69%) | Atrial fibrillation | Thrombocytopenia | 1/13 (7.69%) | |
| | | Cardiac failure congestive | 1/13 (7.69%) | Cardiac failure congestive | Cardiac disorders | | |
| | | Gastrointestinal disorders | | Gastrointestinal disorders | Cardiac failure congestive | 2/13 (15.38%) | |
| | | Vomiting | 1/13 (7.69%) | Vomiting | Atrial fibrillation | 2/13 (15.38%) | |
| | | General disorders | | General disorders | Eye disorders | | |
| | | Pyrexia | 1/13 (7.69%) | Pyrexia | Deafness | 1/13 (7.69%) | |
| | | Infections and infestations | | Infections and infestations | Gastrointestinal disorders | | |
| | | Sepsis | 2/13 (15.38%) | Sepsis | Nausea | 5/13 (38.46%) | |
| | | Pneumonia Bacterial | 1/13 (7.69%) | Pneumonia Bacterial | Diarrhea | 3/13 (23.08%) | |
| | | Septic shock | 1/13 (7.69%) | Septic shock | Vomiting | 2/13 (15.38%) | |
| | | Metabolism and nutrition disorders | | Metabolism and nutrition disorders | Haemorrhoids | 1/13 (7.69%) | |
| | | Dehydration | 1/13 (7.69%) | Dehydration | Dyspepsia | 1/13 (7.69%) | |
| | | Renal and urinary disorders | | Renal and urinary disorders | Abdominal hernia | 1/13 (7.69%) | |
| | | Renal failure acute | 1/13 (7.69%) | Renal failure acute | Stomatitis | 1/13 (7.69%) | |
| | | Respiratory, thoracic and mediastinal disorders | | Respiratory, thoracic and mediastinal disorders | Abdominal pain | 1/13 (7.69%) | |
| | | Pneumonia | 2/13 (15.38%) | Pneumonia | General disorders | | |
| | | Vascular disorders | | Vascular disorders | Fatigue | 6/13 (46.15%) | |
| | | Hypotension | 1/13 (7.69%) | Hypotension | Pyrexia | 4/13 (30.77%) | |

| Study Title | Drug | Serious Adverse Events | | | Other Adverse Events | | |
|--|---------------|------------------------|---------------------------|-----------------|--|---------------------------|--|
| Study of Mogamulizumab + Docetaxel in Subjects With Non-small Cell Lung Cancer | mogamulizumab | arm/group Title | Mogamulizumab + Docetaxel | arm/group Title | arm/group Title | Mogamulizumab + Docetaxel | |
| | | | Affected / at Risk (%) | | | Affected / at Risk (%) | |
| | | | | | Pain | 2/13 (15.38%) | |
| | | | | | Asthenia | 1/13 (7.69%) | |
| | | | | | Chest pain | 1/13 (7.69%) | |
| | | | | | Peripheral swelling | 1/13 (7.69%) | |
| | | | | | Chills | 1/13 (7.69%) | |
| | | | | | Local swelling | 1/13 (7.69%) | |
| | | | | | Oedema peripheral | 1/13 (7.69%) | |
| | | | | | Infections and infestations | | |
| | | | | | Pneumonia | 2/13 (15.38%) | |
| | | | | | Sepsis | 2/13 (15.38%) | |
| | | | | | Thrush | 1/13 (7.69%) | |
| | | | | | Oral candidiasis | 1/13 (7.69%) | |
| | | | | | Urinary tract infection | 1/13 (7.69%) | |
| | | | | | Injury, poisoning and procedural complications | | |
| | | | | | Procedural site reaction | 1/13 (7.69%) | |
| | | | | | Laceration | 1/13 (7.69%) | |
| | | | | | Fall | 1/13 (7.69%) | |
| | | | | | Post procedural oedema | 1/13 (7.69%) | |
| | | | | | Infusion related reaction | 1/13 (7.69%) | |
| | | | | | Investigations | | |
| | | | | | Platelet count decreased | 1/13 (7.69%) | |
| | | | | | Metabolism and nutrition disorders | | |

| Study Title | Drug | Serious Adverse Events | | | Other Adverse Events | | |
|--|---------------|------------------------|---------------------------|-----------------|---|---------------------------|--|
| Study of Mogamulizumab + Docetaxel in Subjects With Non-small Cell Lung Cancer | mogamulizumab | arm/group Title | Mogamulizumab + Docetaxel | arm/group Title | arm/group Title | Mogamulizumab + Docetaxel | |
| | | | Affected / at Risk (%) | | | Affected / at Risk (%) | |
| | | | | | Decreased appetite | 4/13 (30.77%) | |
| | | | | | Dehydration | 3/13 (23.08%) | |
| | | | | | Weight decreased | 2/13 (15.38%) | |
| | | | | | Hyperuricaemia | 1/13 (7.69%) | |
| | | | | | Hypomagnesaemia | 1/13 (7.69%) | |
| | | | | | Hypokalaemia | 1/13 (7.69%) | |
| | | | | | Gout | 1/13 (7.69%) | |
| | | | | | Musculoskeletal and connective tissue disorders | | |
| | | | | | Arthralgia | 2/13 (15.38%) | |
| | | | | | Musculoskeletal pain | 1/13 (7.69%) | |
| | | | | | Bone pain | 1/13 (7.69%) | |
| | | | | | Musculoskeletal chest pain | 1/13 (7.69%) | |
| | | | | | Back pain | 1/13 (7.69%) | |
| | | | | | Myalgia | 1/13 (7.69%) | |
| | | | | | Neck pain | 1/13 (7.69%) | |
| | | | | | Neoplasms benign, malignant and unspecified (incl cysts and polyps) | | |
| | | | | | Metastases to central nervous system | 1/13 (7.69%) | |
| | | | | | Nervous system disorders | | |
| | | | | | Paraesthesia | 2/13 (15.38%) | |
| | | | | | Dizziness | 1/13 (7.69%) | |
| | | | | | Balance disorder | 1/13 (7.69%) | |
| | | | | | Neuropathy peripheral | 1/13 (7.69%) | |

| Study Title | Drug | Serious Adverse Events | | | Other Adverse Events | | |
|--|---------------|------------------------|---------------------------|-----------------|---|---------------------------|--|
| Study of Mogamulizumab + Docetaxel in Subjects With Non-small Cell Lung Cancer | mogamulizumab | arm/group Title | Mogamulizumab + Docetaxel | arm/group Title | arm/group Title | Mogamulizumab + Docetaxel | |
| | | | Affected / at Risk (%) | | | Affected / at Risk (%) | |
| | | | | | Hypoaesthesia | 1/13 (7.69%) | |
| | | | | | Headache | 1/13 (7.69%) | |
| | | | | | Psychiatric disorders | | |
| | | | | | Anxiety | 1/13 (7.69%) | |
| | | | | | Mental status change | 1/13 (7.69%) | |
| | | | | | Insomnia | 1/13 (7.69%) | |
| | | | | | Disorientation | 1/13 (7.69%) | |
| | | | | | Respiratory, thoracic and mediastinal disorders | | |
| | | | | | Dyspnea | 3/13 (23.08%) | |
| | | | | | Paranasal sinus hypersecretion | 1/13 (7.69%) | |
| | | | | | Cough | 1/13 (7.69%) | |
| | | | | | Haemoptysis | 1/13 (7.69%) | |
| | | | | | Dyspnea exertional | 1/13 (7.69%) | |
| | | | | | Hypoxia | 1/13 (7.69%) | |
| | | | | | Productive cough | 1/13 (7.69%) | |
| | | | | | Skin and subcutaneous tissue disorders | | |
| | | | | | Alopecia | 2/13 (15.38%) | |
| | | | | | Rash | 2/13 (15.38%) | |
| | | | | | Palmer-plantar erythrodysesthesia syndrome | 1/13 (7.69%) | |
| | | | | | Rash macular | 1/13 (7.69%) | |
| | | | | | Rash papular | 1/13 (7.69%) | |
| | | | | | Night sweats | 1/13 (7.69%) | |

| Study Title | Drug | Serious Adverse Events | | | Other Adverse Events | | |
|--|---------------|--------------------------------------|---------------------------|-----------------|-------------------------|---------------------------|--|
| Study of Mogamulizumab + Docetaxel in Subjects With Non-small Cell Lung Cancer | mogamulizumab | arm/group Title | Mogamulizumab + Docetaxel | arm/group Title | arm/group Title | Mogamulizumab + Docetaxel | |
| | | | Affected / at Risk (%) | | | Affected / at Risk (%) | |
| | | | | | Rash maculopapular | 1/13 (7.69%) | |
| | | | | | Skin exfoliation | 1/13 (7.69%) | |
| | | | | | Vascular disorders | | |
| | | | | | Orthostatic hypotension | 2/13 (15.38%) | |
| | | | | | Hypertension | 1/13 (7.69%) | |
| | | | | | Hypotension | 1/13 (7.69%) | |
| | | | | | | | |
| A Study to Evaluate the Efficacy and Safety of Anamorelin HCl for the Treatment of Malignancy Associated Weight Loss and Anorexia in Adult Patients With Advanced Non-Small Cell Lung Cancer (NSCLC) | anamorelin | Arm/Group Title | 100 mg Anamorelin HCl | Placebo | | | |
| | | | Affected / at Risk (%) | # Events | Affected / at Risk (%) | # Events | |
| | | Total | 43/159 (27.04%) | | 39/159 (24.53%) | | |
| | | Blood and lymphatic system disorders | | | | | |
| | | Leukopenia†1 | 1/159 (0.63%) | 1 | 0/159 (0.00%) | 0 | |
| | | Pancytopenia†1 | 1/159 (0.63%) | 1 | 0/159 (0.00%) | 0 | |
| | | Anaemia†1 | 0/159 (0.00%) | 0 | 1/159 (0.63%) | 1 | |
| | | Febrile neutropenia†1 | 0/159 (0.00%) | 0 | 1/159 (0.63%) | 1 | |
| | | Thrombocytopenia†1 | 0/159 (0.00%) | 0 | 1/159 (0.63%) | 1 | |
| | | Cardiac disorders | | | | | |
| | | Pericardial effusion†1 | 2/159 (1.26%) | 2 | 0/159 (0.00%) | 0 | |
| | | Acute myocardial infarction†1 | 1/159 (0.63%) | 1 | 0/159 (0.00%) | 0 | |
| | | Atrial flutter†1 | 1/159 (0.63%) | 1 | 1/159 (0.63%) | 1 | |
| | | Cardiac arrest†1 | 1/159 (0.63%) | 1 | 0/159 (0.00%) | 0 | |
| | | Cardiac failure†1 | 1/159 (0.63%) | 1 | 0/159 (0.00%) | 0 | |
| | | Myocardial infarction†1 | 1/159 (0.63%) | 1 | 0/159 (0.00%) | 0 | |
| | | Acute coronary syndrome†1 | 0/159 (0.00%) | 0 | 1/159 (0.63%) | 1 | |
| | | Atrial fibrillation†1 | 0/159 (0.00%) | 0 | 1/159 (0.63%) | 1 | |
| | | Cardiac tamponade†1 | 0/159 (0.00%) | 0 | 2/159 (1.26%) | 2 | |

| Study Title | Drug | Serious Adverse Events | | | Other Adverse Events | | |
|--|------------|--|------------------------|----------|------------------------|----------|--|
| A Study to Evaluate the Efficacy and Safety of Anamorelin HCl for the Treatment of Malignancy Associated Weight Loss and Anorexia in Adult Patients With Advanced Non-Small Cell Lung Cancer (NSCLC) | anamorelin | Arm/Group Title | 100 mg Anamorelin HCl | Placebo | | | |
| | | | Affected / at Risk (%) | # Events | Affected / at Risk (%) | # Events | |
| | | Gastrointestinal disorders | | | | | |
| | | Autoimmune colitis†1 | 1/159 (0.63%) | 1 | 0/159 (0.00%) | 0 | |
| | | Gastric haemorrhage†1 | 1/159 (0.63%) | 1 | 0/159 (0.00%) | 0 | |
| | | Ileus†1 | 1/159 (0.63%) | 1 | 0/159 (0.00%) | 0 | |
| | | Intestinal obstruction†1 | 1/159 (0.63%) | 1 | 0/159 (0.00%) | 0 | |
| | | Oesophageal stenosis†1 | 1/159 (0.63%) | 1 | 0/159 (0.00%) | 0 | |
| | | Small intestinal ulcer perforation†1 | 1/159 (0.63%) | 1 | 0/159 (0.00%) | 0 | |
| | | Vomiting†1 | 1/159 (0.63%) | 1 | 0/159 (0.00%) | 0 | |
| | | Diverticulum intestinal haemorrhagic†1 | 0/159 (0.00%) | 0 | 1/159 (0.63%) | 2 | |
| | | Large intestinal obstruction†1 | 0/159 (0.00%) | 0 | 1/159 (0.63%) | 1 | |
| | | General disorders | | | | | |
| | | Pain†1 | 1/159 (0.63%) | 1 | 0/159 (0.00%) | 0 | |
| | | Asthenia†1 | 0/159 (0.00%) | 0 | 1/159 (0.63%) | 1 | |
| | | Oedema peripheral†1 | 0/159 (0.00%) | 0 | 1/159 (0.63%) | 1 | |
| | | Sudden death†1 | 0/159 (0.00%) | 0 | 2/159 (1.26%) | 2 | |
| | | Atrial fibrillation†1 | 0/159 (0.00%) | 0 | 1/159 (0.63%) | 1 | |
| | | Cardiac tamponade†1 | 0/159 (0.00%) | 0 | 2/159 (1.26%) | 2 | |
| | | Hepatobiliary disorders | | | | | |
| | | Hepatic failure†1 | 0/159 (0.00%) | 0 | 1/159 (0.63%) | 1 | |
| | | Infections and infestations | | | | | |
| | | Bronchitis†1 | 2/159 (1.26%) | 2 | 0/159 (0.00%) | 0 | |
| | | Peritonitis†1 | 1/159 (0.63%) | 1 | 0/159 (0.00%) | 0 | |
| | | Pneumonia†1 | 1/159 (0.63%) | 1 | 1/159 (0.63%) | 1 | |
| | | Sepsis†1 | 1/159 (0.63%) | 1 | 1/159 (0.63%) | 1 | |
| | | Viral infection†1 | 1/159 (0.63%) | 1 | 0/159 (0.00%) | 0 | |
| | | Empyema†1 | 0/159 (0.00%) | 0 | 1/159 (0.63%) | 1 | |
| | | Gastroenteritis†1 | 0/159 (0.00%) | 0 | 1/159 (0.63%) | 1 | |
| | | Pneumonia viral†1 | 0/159 (0.00%) | 0 | 1/159 (0.63%) | 1 | |

| Study Title | Drug | Serious Adverse Events | | | Other Adverse Events | | |
|--|------------|---|------------------------|----------|------------------------|----------|--|
| A Study to Evaluate the Efficacy and Safety of Anamorelin HCl for the Treatment of Malignancy Associated Weight Loss and Anorexia in Adult Patients With Advanced Non-Small Cell Lung Cancer (NSCLC) | anamorelin | Arm/Group Title | 100 mg Anamorelin HCl | Placebo | | | |
| | | | Affected / at Risk (%) | # Events | Affected / at Risk (%) | # Events | |
| | | Respiratory tract infection†1 | 0/159 (0.00%) | 0 | 1/159 (0.63%) | 1 | |
| | | Injury, poisoning and procedural complications | | | | | |
| | | Chemical peritonitis†1 | 1/159 (0.63%) | 1 | 0/159 (0.00%) | 0 | |
| | | Investigations | | | | | |
| | | Alanine aminotransferase increased†1 | 0/159 (0.00%) | 0 | 1/159 (0.63%) | 1 | |
| | | Aspartate aminotransferase increased†1 | 0/159 (0.00%) | 0 | 1/159 (0.63%) | 1 | |
| | | Musculoskeletal and connective tissue disorders | | | | | |
| | | Arthralgia†1 | 1/159 (0.63%) | 1 | 0/159 (0.00%) | 0 | |
| | | Back pain†1 | 1/159 (0.63%) | 1 | 0/159 (0.00%) | 0 | |
| | | Osteonecrosis of jaw†1 | 1/159 (0.63%) | 1 | 0/159 (0.00%) | 0 | |
| | | Neoplasms benign, malignant and unspecified (incl cysts and polyps) | | | | | |
| | | Non-small cell lung cancer†1 | 15/159 (9.43%) | 15 | 16/159 (10.06%) | 16 | |
| | | Metastases to central nervous system†1 | 3/159 (1.89%) | 3 | 1/159 (0.63%) | 1 | |
| | | Cancer pain†1 | 0/159 (0.00%) | 0 | 1/159 (0.63%) | 1 | |
| | | Metastases to liver†1 | 0/159 (0.00%) | 0 | 1/159 (0.63%) | 1 | |
| | | Nervous system disorders | | | | | |
| | | Cerebrovascular accident†1 | 1/159 (0.63%) | 1 | 1/159 (0.63%) | 1 | |
| | | Depressed level of consciousness†1 | 1/159 (0.63%) | 1 | 0/159 (0.00%) | 0 | |
| | | Intracranial pressure increased†1 | 1/159 (0.63%) | 1 | 0/159 (0.00%) | 0 | |
| | | Ischaemic stroke†1 | 0/159 (0.00%) | 0 | 1/159 (0.63%) | 1 | |
| | | Syncope†1 | 0/159 (0.00%) | 0 | 1/159 (0.63%) | 1 | |
| | | Renal and urinary disorders | | | | | |
| | | Haematuria†1 | 1/159 (0.63%) | 1 | 0/159 (0.00%) | 0 | |

| Study Title | Drug | Serious Adverse Events | | | Other Adverse Events | | |
|--|------------|---|------------------------|----------|------------------------|----------|--|
| A Study to Evaluate the Efficacy and Safety of Anamorelin HCl for the Treatment of Malignancy Associated Weight Loss and Anorexia in Adult Patients With Advanced Non-Small Cell Lung Cancer (NSCLC) | anamorelin | Arm/Group Title | 100 mg Anamorelin HCl | Placebo | | | |
| | | | Affected / at Risk (%) | # Events | Affected / at Risk (%) | # Events | |
| | | Hydronephrosis†1 | 1/159 (0.63%) | 1 | 0/159 (0.00%) | 0 | |
| | | Urinary bladder haemorrhage†1 | 1/159 (0.63%) | 1 | 0/159 (0.00%) | 0 | |
| | | Acute kidney injury†1 | 0/159 (0.00%) | 0 | 1/159 (0.63%) | 1 | |
| | | Respiratory, thoracic and mediastinal disorders | | | | | |
| | | Acute respiratory failure†1 | 2/159 (1.26%) | 2 | 0/159 (0.00%) | 0 | |
| | | Pulmonary embolism†1 | 2/159 (1.26%) | 2 | 0/159 (0.00%) | 0 | |
| | | Respiratory failure†1 | 2/159 (1.26%) | 2 | 0/159 (0.00%) | 0 | |
| | | Chronic obstructive pulmonary disease†1 | 1/159 (0.63%) | 1 | 1/159 (0.63%) | 2 | |
| | | Hypoxia†1 | 1/159 (0.63%) | 1 | 0/159 (0.00%) | 0 | |
| | | Dyspnoea†1 | 0/159 (0.00%) | 0 | 3/159 (1.89%) | 3 | |
| | | Haemoptysis†1 | 0/159 (0.00%) | 0 | 2/159 (1.26%) | 2 | |
| | | Haemothorax†1 | 0/159 (0.00%) | 0 | 1/159 (0.63%) | 1 | |
| | | | Affected / at Risk (%) | # Events | Affected / at Risk (%) | # Events | |
| | | Total | 43/159 (27.04%) | | 39/159 (24.53%) | | |
| | | Blood and lymphatic system disorders | | | | | |
| | | Leukopenia†1 | 1/159 (0.63%) | 1 | 0/159 (0.00%) | 0 | |
| | | Pancytopenia†1 | 1/159 (0.63%) | 1 | 0/159 (0.00%) | 0 | |
| | | Anaemia†1 | 0/159 (0.00%) | 0 | 1/159 (0.63%) | 1 | |
| | | Febrile neutropenia†1 | 0/159 (0.00%) | 0 | 1/159 (0.63%) | 1 | |
| | | Thrombocytopenia†1 | 0/159 (0.00%) | 0 | 1/159 (0.63%) | 1 | |
| | | Cardiac disorders | | | | | |
| | | Pericardial effusion†1 | 2/159 (1.26%) | 2 | 0/159 (0.00%) | 0 | |
| | | Acute myocardial effusion†1 | 1/159 (0.63%) | 1 | 0/159 (0.00%) | 0 | |
| | | Atrial flutter†1 | 1/159 (0.63%) | 1 | 1/159 (0.63%) | 1 | |
| | | Cardiac arrest†1 | 1/159 (0.63%) | 1 | 0/159 (0.00%) | 0 | |

| Study Title | Drug | Serious Adverse Events | | | Other Adverse Events | | |
|--|------------|--|------------------------|----------|------------------------|----------|--|
| A Study to Evaluate the Efficacy and Safety of Anamorelin HCl for the Treatment of Malignancy Associated Weight Loss and Anorexia in Adult Patients With Advanced Non-Small Cell Lung Cancer (NSCLC) | anamorelin | Arm/Group Title | 100 mg Anamorelin HCl | Placebo | | | |
| | | | Affected / at Risk (%) | # Events | Affected / at Risk (%) | # Events | |
| | | Cardiac failure†1 | 1/159 (0.63%) | 1 | 0/159 (0.00%) | 0 | |
| | | Myocardial infarction†1 | 1/159 (0.63%) | 1 | 0/159 (0.00%) | 0 | |
| | | Acute coronary syndrome†1 | 0/159 (0.00%) | 0 | 1/159 (0.63%) | 1 | |
| | | Atrial fibrillation†1 | 0/159 (0.00%) | 0 | 1/159 (0.63%) | 1 | |
| | | Cardiac tamponade†1 | 0/159 (0.00%) | 0 | 2/159 (1.26%) | 2 | |
| | | Gastrointestinal disorders | | | | | |
| | | Autoimmune colitis†1 | 1/159 (0.63%) | 1 | 0/159 (0.00%) | 0 | |
| | | Gastric haemorrhage†1 | 1/159 (0.63%) | 1 | 0/159 (0.00%) | 0 | |
| | | Ileus†1 | 1/159 (0.63%) | 1 | 0/159 (0.00%) | 0 | |
| | | Intestinal obstruction†1 | 1/159 (0.63%) | 1 | 0/159 (0.00%) | 0 | |
| | | Oesophageal stenosis†1 | 1/159 (0.63%) | 1 | 0/159 (0.00%) | 0 | |
| | | Small intestinal ulcer perforation†1 | 1/159 (0.63%) | 1 | 0/159 (0.00%) | 0 | |
| | | Vomiting†1 | 1/159 (0.63%) | 1 | 0/159 (0.00%) | 0 | |
| | | Diverticulum intestinal haemorrhagic†1 | 0/159 (0.00%) | 0 | 1/159 (0.63%) | 2 | |
| | | Large intestinal obstruction†1 | 0/159 (0.00%) | 0 | 1/159 (0.63%) | 1 | |
| | | General disorders | | | | | |
| | | Pain†1 | 1/159 (0.63%) | 1 | 0/159 (0.00%) | 0 | |
| | | Asthenia†1 | 0/159 (0.00%) | 0 | 1/159 (0.63%) | 1 | |
| | | Oedema peripheral†1 | 0/159 (0.00%) | 0 | 1/159 (0.63%) | 1 | |
| | | Sudden death†1 | 0/159 (0.00%) | 0 | 2/159 (1.26%) | 2 | |
| | | Hepatobiliary disorders | | | | | |
| | | Hepatic failure†1 | 0/159 (0.00%) | 0 | 1/159 (0.63%) | 1 | |
| | | Infections and infestations | | | | | |
| | | Bronchitis†1 | 2/159 (1.26%) | 2 | 0/159 (0.00%) | 0 | |
| | | Peritonitis†1 | 1/159 (0.63%) | 1 | 0/159 (0.00%) | 0 | |
| | | Pneumonia†1 | 1/159 (0.63%) | 1 | 1/159 (0.63%) | 1 | |
| | | Sepsis†1 | 1/159 (0.63%) | 1 | 1/159 (0.63%) | 1 | |
| | | Viral infection†1 | 1/159 (0.63%) | 1 | 0/159 (0.00%) | 0 | |

| Study Title | Drug | Serious Adverse Events | | | Other Adverse Events | | |
|--|------------|---|------------------------|----------|------------------------|----------|--|
| A Study to Evaluate the Efficacy and Safety of Anamorelin HCl for the Treatment of Malignancy Associated Weight Loss and Anorexia in Adult Patients With Advanced Non-Small Cell Lung Cancer (NSCLC) | anamorelin | Arm/Group Title | 100 mg Anamorelin HCl | Placebo | | | |
| | | | Affected / at Risk (%) | # Events | Affected / at Risk (%) | # Events | |
| | | Empyema†1 | 0/159 (0.00%) | 0 | 1/159 (0.63%) | 1 | |
| | | Gastroenteritis†1 | 0/159 (0.00%) | 0 | 1/159 (0.63%) | 1 | |
| | | Pneumonia viral†1 | 0/159 (0.00%) | 0 | 1/159 (0.63%) | 1 | |
| | | Respiratory tract infection†1 | 0/159 (0.00%) | 0 | 1/159 (0.63%) | 1 | |
| | | Injury, poisoning and procedural complications | | | | | |
| | | Chemical peritonitis†1 | 1/159 (0.63%) | 1 | 0/159 (0.00%) | 0 | |
| | | Investigations | | | | | |
| | | Alanine aminotransferase increased†1 | 0/159 (0.00%) | 0 | 1/159 (0.63%) | 1 | |
| | | Aspartate aminotransferase increased†1 | 0/159 (0.00%) | 0 | 1/159 (0.63%) | 1 | |
| | | Musculoskeletal and connective tissue disorders | | | | | |
| | | Arthralgia†1 | 1/159 (0.63%) | 1 | 0/159 (0.00%) | 0 | |
| | | Back pain†1 | 1/159 (0.63%) | 1 | 0/159 (0.00%) | 0 | |
| | | Osteonecrosis of jaw†1 | 1/159 (0.63%) | 1 | 0/159 (0.00%) | 0 | |
| | | Neoplasms benign, malignant and unspecified (incl cysts and polyps) | | | | | |
| | | Non-small cell lung cancer†1 | 15/159 (9.43%) | 15 | 16/159 (10.06%) | 16 | |
| | | Metastases to central nervous system†1 | 3/159 (1.89%) | 3 | 1/159 (0.63%) | 1 | |
| | | Cancer pain†1 | 0/159 (0.00%) | 0 | 1/159 (0.63%) | 1 | |
| | | Metastases to liver†1 | 0/159 (0.00%) | 0 | 1/159 (0.63%) | 1 | |
| | | Nervous system disorders | | | | | |
| | | Cerebrovascular accident†1 | 1/159 (0.63%) | 1 | 1/159 (0.63%) | 1 | |
| | | Depressed level of consciousness†1 | 1/159 (0.63%) | 1 | 0/159 (0.00%) | 0 | |
| | | Intracranial pressure increased†1 | 1/159 (0.63%) | 1 | 0/159 (0.00%) | 0 | |
| | | Ischaemic stroke†1 | 0/159 (0.00%) | 0 | 1/159 (0.63%) | 1 | |
| | | Syncope†1 | 0/159 (0.00%) | 0 | 1/159 (0.63%) | 1 | |

| Study Title | Drug | Serious Adverse Events | | | Other Adverse Events | | |
|--|------------|---|------------------------|----------|------------------------|----------|--|
| A Study to Evaluate the Efficacy and Safety of Anamorelin HCl for the Treatment of Malignancy Associated Weight Loss and Anorexia in Adult Patients With Advanced Non-Small Cell Lung Cancer (NSCLC) | anamorelin | Arm/Group Title | 100 mg Anamorelin HCl | Placebo | | | |
| | | | Affected / at Risk (%) | # Events | Affected / at Risk (%) | # Events | |
| | | Renal and urinary disorders | | | | | |
| | | Haematuria†1 | 1/159 (0.63%) | 1 | 0/159 (0.00%) | 0 | |
| | | Hydronephrosis†1 | 1/159 (0.63%) | 1 | 0/159 (0.00%) | 0 | |
| | | Urinary bladder haemorrhage†1 | 1/159 (0.63%) | 1 | 0/159 (0.00%) | 0 | |
| | | Acute kidney injury†1 | 0/159 (0.00%) | 0 | 1/159 (0.63%) | 1 | |
| | | Respiratory, thoracic and mediastinal disorders | | | | | |
| | | Acute respiratory failure†1 | 2/159 (1.26%) | 2 | 0/159 (0.00%) | 0 | |
| | | Pulmonary embolism†1 | 2/159 (1.26%) | 2 | 0/159 (0.00%) | 0 | |
| | | Respiratory failure†1 | 2/159 (1.26%) | 2 | 0/159 (0.00%) | 0 | |
| | | Chronic obstructive pulmonary disease†1 | 1/159 (0.63%) | 1 | 1/159 (0.63%) | 2 | |
| | | Hypoxia†1 | 1/159 (0.63%) | 1 | 0/159 (0.00%) | 0 | |
| | | Dyspnoea†1 | 0/159 (0.00%) | 0 | 3/159 (1.89%) | 3 | |
| | | Haemoptysis†1 | 0/159 (0.00%) | 0 | 2/159 (1.26%) | 2 | |
| | | Haemothorax†1 | 0/159 (0.00%) | 0 | 1/159 (0.63%) | 1 | |
| | | Arm/Group Title | 100 mg Anamorelin HCl | Placebo | | | |
| | | | Affected / at Risk (%) | # Events | Affected / at Risk (%) | # Events | |
| | | Total | 82/159 (51.57%) | | 87/159 (54.72%) | | |
| | | Blood and lymphatic system disorders | | | | | |
| | | Anaemia†1 | 14/159 (8.81%) | 17 | 19/159 (11.95%) | 24 | |
| | | Leukopenia†1 | 4/159 (2.52%) | 4 | 1/159 (0.63%) | 1 | |
| | | Neutropenia†1 | 2/159 (1.26%) | 5 | 4/159 (2.52%) | 5 | |
| | | Thrombocytopenia†1 | 2/159 (1.26%) | 4 | 5/159 (3.14%) | 5 | |
| | | Gastrointestinal disorders | | | | | |
| | | Nausea†1 | 9/159 (5.66%) | 9 | 7/159 (4.40%) | 7 | |
| | | Diarrhoea†1 | 4/159 (2.52%) | 5 | 5/159 (3.14%) | 5 | |

| Study Title | Drug | Serious Adverse Events | | | Other Adverse Events | | |
|--|------------|--|------------------------|----------|------------------------|----------|--|
| A Study to Evaluate the Efficacy and Safety of Anamorelin HCl for the Treatment of Malignancy Associated Weight Loss and Anorexia in Adult Patients With Advanced Non-Small Cell Lung Cancer (NSCLC) | anamorelin | Arm/Group Title | 100 mg Anamorelin HCl | Placebo | | | |
| | | | Affected / at Risk (%) | # Events | Affected / at Risk (%) | # Events | |
| | | Vomiting†1 | 3/159 (1.89%) | 4 | 7/159 (4.40%) | 10 | |
| | | General disorders | | | | | |
| | | Asthenia†1 | 8/159 (5.03%) | 9 | 4/159 (2.52%) | 5 | |
| | | Fatigue†1 | 6/159 (3.77%) | 6 | 11/159 (6.92%) | 13 | |
| | | Oedema Peripheral†1 | 6/159 (3.77%) | 9 | 6/159 (3.77%) | 11 | |
| | | Chest Pain†1 | 2/159 (1.26%) | 2 | 7/159 (4.40%) | 7 | |
| | | Pyrexia†1 | 2/159 (1.26%) | 2 | 4/159 (2.52%) | 4 | |
| | | Infections and infestations | | | | | |
| | | Corona Virus Infection†1 | 0/159 (0.00%) | 0 | 4/159 (2.52%) | 4 | |
| | | Investigations | | | | | |
| | | Platelet Count Decreased†1 | 4/159 (2.52%) | 4 | 4/159 (2.52%) | 4 | |
| | | Metabolism and nutrition disorders | | | | | |
| | | Hyperkalaemia†1 | 6/159 (3.77%) | 7 | 2/159 (1.26%) | 2 | |
| | | Decreased Appetite†1 | 5/159 (3.14%) | 6 | 4/159 (2.52%) | 4 | |
| | | Hypocalcaemia †1 | 5/159 (3.14%) | 5 | 1/159 (0.63%) | 1 | |
| | | Nervous system disorders | | | | | |
| | | Headache†1 | 4/159 (2.52%) | 4 | 3/159 (1.89%) | 4 | |
| | | Respiratory, thoracic and mediastinal disorders | | | | | |
| | | Dyspnoea†1 | 6/159 (3.77%) | 6 | 7/159 (4.40%) | 8 | |
| | | Cough†1 | 0/159 (0.00%) | 0 | 4/159 (2.52%) | 4 | |
| | | Pleural Effusion†1 | 0/159 (0.00%) | 0 | 4/159 (2.52%) | 4 | |
| | | † Indicates events were collected by systematic assessment | | | | | |
| | | 1 Term from vocabulary, MedDRA version 22.0 | | | | | |
| | | Arm/Group Title | Anamorelin HCl | Placebo | | | |
| | | | Affected / at Risk (%) | # Events | Affected / at Risk (%) | # Events | |
| | | Total | 182/320 (56.88%) | | 84/161 (52.17%) | | |
| | | Blood and lymphatic system disorders | | | | | |

| Study Title | Drug | Serious Adverse Events | | | Other Adverse Events | | |
|--|------------|--|------------------------|----------|------------------------|----------|--|
| A Study to Evaluate the Efficacy and Safety of Anamorelin HCl for the Treatment of Malignancy Associated Weight Loss and Anorexia in Adult Patients With Advanced Non-Small Cell Lung Cancer (NSCLC) | anamorelin | Arm/Group Title | 100 mg Anamorelin HCl | Placebo | | | |
| | | | Affected / at Risk (%) | # Events | Affected / at Risk (%) | # Events | |
| | | Anaemia†1 | 119/320 (37.19%) | 179 | 66/161 (40.99%) | 114 | |
| | | Leukopenia†1 | 16/320 (5.00%) | 17 | 10/161 (6.21%) | 10 | |
| | | Neutropenia†1 | 28/320 (8.75%) | 34 | 22/161 (13.66%) | 34 | |
| | | Thrombocytopenia†1 | 29/320 (9.06%) | 42 | 23/161 (14.29%) | 34 | |
| | | Gastrointestinal disorders | | | | | |
| | | Diarrhoea†1 | 17/320 (5.31%) | 21 | 9/161 (5.59%) | 9 | |
| | | Nausea†1 | 29/320 (9.06%) | 44 | 15/161 (9.32%) | 21 | |
| | | Vomiting†1 | 25/320 (7.81%) | 27 | 8/161 (4.97%) | 8 | |
| | | General disorders | | | | | |
| | | Asthenia†1 | 19/320 (5.94%) | 23 | 9/161 (5.59%) | 10 | |
| | | Fatigue†1 | 25/320 (7.81%) | 28 | 13/161 (8.07%) | 15 | |
| | | Pyrexia†1 | 15/320 (4.69%) | 16 | 1/161 (0.62%) | 1 | |
| | | Investigations | | | | | |
| | | Alanine aminotransferase increased†1 | 50/320 (15.63%) | 78 | 14/161 (8.70%) | 20 | |
| | | Aspartate aminotransferase increased†1 | 37/320 (11.56%) | 52 | 15/161 (9.32%) | 21 | |
| | | Blood alkaline phosphatase increased†1 | 34/320 (10.63%) | 40 | 10/161 (6.21%) | 14 | |
| | | Platelet count decreased†1 | 14/320 (4.38%) | 30 | 10/161 (6.21%) | 16 | |
| | | Metabolism and nutrition disorders | | | | | |
| | | Decreased appetite†1 | 13/320 (4.06%) | 15 | 8/161 (4.97%) | 8 | |
| | | Hyperglycaemia†1 | 35/320 (10.94%) | 41 | 10/161 (6.21%) | 11 | |
| | | Respiratory, thoracic and mediastinal disorders | | | | | |
| | | Cough†1 | 14/320 (4.38%) | 14 | 8/161 (4.97%) | 9 | |
| | | Dyspnoea†1 | 19/320 (5.94%) | 24 | 11/161 (6.83%) | 13 | |
| | | † Indicates events were collected by systematic assessment | | | | | |
| | | 1 Term from vocabulary, MedDRA 14.0 | | | | | |
| | | 、 | | | | | |

| Study Title | Drug | Serious Adverse Events | | | Other Adverse Events | | |
|--|------------|---|------------------------|----------|------------------------|----------|--|
| A Study to Evaluate the Efficacy and Safety of Anamorelin HCl for the Treatment of Malignancy Associated Weight Loss and Anorexia in Adult Patients With Advanced Non-Small Cell Lung Cancer (NSCLC) | anamorelin | Arm/Group Title | 100 mg Anamorelin HCl | Placebo | | | |
| | | | Affected / at Risk (%) | # Events | Affected / at Risk (%) | # Events | |
| | | Arm/Group Title | Anamorelin HCl | Placebo | | | |
| | | | Affected / at Risk (%) | # Events | Affected / at Risk (%) | # Events | |
| | | Total | 156/330 (47.27%) | | 72/161 (44.72%) | | |
| | | Blood and lymphatic system disorders | | | | | |
| | | Anaemia†1 | 48/330 (14.55%) | 61 | 21/161 (13.04%) | 28 | |
| | | Leukopenia†1 | 25/330 (7.58%) | 29 | 6/161 (3.73%) | 7 | |
| | | Neutropenia†1 | 31/330 (9.39%) | 48 | 10/161 (6.21%) | 14 | |
| | | Gastrointestinal disorders | | | | | |
| | | Nausea†1 | 19/330 (5.76%) | 20 | 13/161 (8.07%) | 13 | |
| | | Vomiting†1 | 9/330 (2.73%) | 11 | 9/161 (5.59%) | 12 | |
| | | General disorders | | | | | |
| | | Asthenia†1 | 29/330 (8.79%) | 30 | 16/161 (9.94%) | 19 | |
| | | Metabolism and nutrition disorders | | | | | |
| | | Hyperglycaemia †1 | 23/330 (6.97%) | 32 | 3/161 (1.86%) | 3 | |
| | | Skin and subcutaneous tissue disorders | | | | | |
| | | Alopecia†1 | 29/330 (8.79%) | 35 | 14/161 (8.70%) | 15 | |
| | | †Indicates events were collected by systematic assessment | | | | | |
| | | 1 | | | | | |
| | | Term from vocabulary, MedDRA 14.0 | | | | | |
| | | Arm/Group Title | Anamorelin HCl | Placebo | | | |
| | | | Affected / at Risk (%) | # Events | Affected / at Risk (%) | # Events | |
| | | Total | 94/343 (27.41%) | | 57/167 (34.13%) | | |
| | | Blood and lymphatic system disorders | | | | | |
| | | Anaemia†1 | 45/343 (13.12%) | 56 | 25/167 (14.97%) | 37 | |
| | | Neutropenia†1 | 18/343 (5.25%) | 21 | 8/167 (4.79%) | 8 | |
| | | General disorders | | | | | |
| | | Asthenia†1 | 19/343 (5.54%) | 20 | 14/167 (8.38%) | 14 | |
| | | Metabolism and nutrition disorders | | | | | |

| Study Title | Drug | Serious Adverse Events | | | Other Adverse Events | | |
|--|------------|--|------------------------|----------|------------------------|----------|--|
| A Study to Evaluate the Efficacy and Safety of Anamorelin HCl for the Treatment of Malignancy Associated Weight Loss and Anorexia in Adult Patients With Advanced Non-Small Cell Lung Cancer (NSCLC) | anamorelin | Arm/Group Title | 100 mg Anamorelin HCl | Placebo | | | |
| | | | Affected / at Risk (%) | # Events | Affected / at Risk (%) | # Events | |
| | | Decreased appetite†1 | 12/343 (3.50%) | 13 | 10/167 (5.99%) | 10 | |
| | | † Indicates events were collected by systematic assessment | | | | | |
| | | 1 Term from vocabulary, MedDRA Version 14.0 | | | | | |

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