Ivonescimab Plus Chemotherapy Demonstrates Statistically Significant and Clinically Meaningful Improvement in Progression-Free Survival in Patients with EGFR-Mutant Non-Small Cell Lung Cancer after EGFR TKI Therapy in Global Study

Consistent Results Noted between Single Region HARMONi-A and Multiregional HARMONi Studies; Favorable Trends in Sub-Populations from North America and China for Both Primary Endpoints Were Observed

Ivonescimab in Combination with Chemotherapy Reduces the Risk of Disease Progression or Death by 48% Compared to Chemotherapy Alone; Positive Overall Survival Trend Observed with Hazard Ratio of 0.79

HARMONi Represents the First Phase III Trial to Evaluate Ivonescimab in a Multiregional Setting

Summit to Determine Timing of US BLA Filing

Miami, Florida, May 30, 2025 - Summit Therapeutics Inc. (NASDAQ: SMMT) ("Summit," "we," or the "Company") today announced topline results from the Phase III clinical trial, HARMONi, the first global Phase III study evaluating ivonescimab, successfully met the progression-free survival (PFS) primary endpoint and showed a positive trend in the other primary endpoint, overall survival (OS).

HARMONi is a multiregional, double-blinded, placebo-controlled, Phase III study sponsored by Summit evaluating ivonescimab plus platinum-doublet chemotherapy compared to placebo plus platinum-doublet chemotherapy in patients with epidermal growth factor receptor (EGFR)-mutated, locally advanced or metastatic non-squamous non-small cell lung cancer (NSCLC) who have progressed after treatment with a 3rd generation EGFR tyrosine kinase inhibitor (TKI). This is a clinical setting with a patient population where PD-1 monoclonal antibodies have previously been unsuccessful in Phase III global clinical trials in showing either a PFS or OS benefit.

Approximately 38% of patients were randomized from western countries (ex-Asia), consistent with other recent multiregional Phase III studies in patients with EGFR-mutated NSCLC.

At the prespecified primary data analysis, ivonescimab in combination with chemotherapy demonstrated a statistically significant and clinically meaningful improvement in progression-free survival, with a hazard ratio of 0.52 (95% CI: 0.41 – 0.66; p<0.00001). PFS was measured by blinded independent central radiology review committee (BICR) compared to placebo in combination with chemotherapy. A clinically meaningful hazard ratio was observed in both Asia and ex-Asia sub-populations. The primary analysis demonstrated the consistency of the magnitude of the PFS benefit between patients randomized in Asia and ex-Asia, as well as the consistency in a single-region study (HARMONi-A) with this multiregional study.

Ivonescimab in combination with chemotherapy showed a positive trend in OS in the primary analysis without achieving a statistically significant benefit with a hazard ratio of 0.79 (95% CI: 0.62 – 1.01; p=0.057). This trend provides further support for its use in 2L+ EGFRm NSCLC, a setting where high unmet need continues to exist with limited approved options in the United States and other western territories. There are no current FDA-approved regimens that have demonstrated a statistically significant overall survival benefit in this patient setting. The median follow-up time for western patients was less than the median overall survival at the time of the analysis, and these patients may continue to be followed for long-term outcomes. Both Asian and North American patients demonstrated a positive trend in overall survival. The results of the primary analysis in this multiregional study

were consistent with that of the single-region HARMONi-A study, which demonstrated an overall survival hazard ratio of 0.80 at 52% data maturity in a similar patient population.

There were no new safety signals noted in this Phase III study. Grade 3 or higher treatment-emergent adverse events (TEAEs) were reported for 56.9% of patients in the ivonescimab + chemotherapy arm vs 50.0% with chemotherapy alone. Fatal TEAEs (excluding disease progression) were reported for 1.8% of patients in the ivonescimab + chemotherapy arm vs. 2.8% in those patients receiving chemotherapy alone. The safety profile of ivonescimab + chemotherapy was acceptable and manageable in the context of the observed clinical benefit.

“The evidence of a consistent benefit in PFS for both Asian and western patients, as well as the consistent overall survival results between the single-region HARMONi-A study and our global HARMONi study demonstrates the potential benefit ivonescimab has to bring to patients around the world, including the United States,” stated Robert W. Duggan, Chairman and Co-Chief Executive Officer of Summit Therapeutics.

Based on the results of the HARMONi clinical trial, Summit, at present time, intends to file a Biologics License Application (BLA) in order to seek approval for ivonescimab plus chemotherapy in this setting. Based on discussions with the United States Food & Drug Administration (FDA), under our determination and subject to our review, Summit will consider the timing of the filing of this BLA. The FDA noted that a statistically significant overall survival benefit is necessary to support marketing authorization, which will weigh into Summit’s considerations regarding the timing of a potential BLA filing.

A more complete data presentation from the clinical study is intended to be shared at a future major medical conference.

“Our conviction in the promise that this therapy holds for patients continues to be validated: we believe that ivonescimab has the potential to make a meaningful difference for the betterment of patients’ lives,” added Dr. Maky Zanganeh, President and Co-CEO of Summit.

The positive Phase III HARMONi study results, along with the approval of ivonescimab in China in combination with chemotherapy based on the results of the HARMONi-A trial and the subsequent supplemental approval of ivonescimab monotherapy in China for first-line treatment of patients with advanced NSCLC whose tumors have positive PD-L1 expression based on the results of the HARMONi-2 trial, further substantiates the purposefully-engineered, differentiated mechanism of action of ivonescimab, a PD-1 / VEGF bispecific antibody evidencing cooperative binding characteristics, and its opportunity to improve upon the existing standards of care for solid tumors, including in settings where existing immune checkpoint inhibitors are indicated.

We would like to offer our heartfelt gratitude to each of the patients, physicians, nurses, and caregivers who participated in and supported this clinical study. We are grateful to the dedication of our investigators and patients who are essential in advancing innovative therapies and bringing to patients the most advanced therapies for those facing unfortunate diagnoses.

About Ivonescimab

Ivonescimab, known as SMT112 in Summit’s license territories, North America, South America, Europe, the Middle East, Africa, and Japan, and as AK112 in China and Australia, is a novel, potential first-in-class investigational bispecific antibody combining the effects of immunotherapy via a blockade of PD-1 with the anti-angiogenesis

effects associated with blocking VEGF into a single molecule. Ivonescimab displays unique cooperative binding to each of its intended targets with multifold higher affinity to PD-1 when in the presence of VEGF.

This could differentiate ivonescimab as there is potentially higher expression (presence) of both PD-1 and VEGF in tumor tissue and the tumor microenvironment (TME) as compared to normal tissue in the body. Ivonescimab's tetravalent structure (four binding sites) enables higher avidity (accumulated strength of multiple binding interactions) in the TME (Zhong, et al, SITC, 2023). This tetravalent structure, the intentional novel design of the molecule, and bringing these two targets into a single bispecific antibody with cooperative binding qualities have the potential to direct ivonescimab to the tumor tissue versus healthy tissue. The intent of this design, together with a half-life of 6 to 7 days after the first dose (Zhong, et al, SITC, 2023), is to improve upon previously established efficacy thresholds, in addition to side effects and safety profiles associated with these targets.

Ivonescimab was engineered by Akeso Inc. (HKEX Code: 9926.HK) and is currently engaged in multiple Phase III clinical trials. Over 2,300 patients have been treated with ivonescimab in clinical studies globally.

Summit has begun its clinical development of ivonescimab in non-small cell lung cancer (NSCLC), commencing enrollment in 2023 in two multiregional Phase III clinical trials, HARMONi and HARMONi-3, and the Company has begun to enroll patients in the United States for HARMONi-7.

HARMONi is a Phase III clinical trial which is evaluating ivonescimab combined with chemotherapy compared to placebo plus chemotherapy in patients with EGFR-mutated, locally advanced or metastatic non-squamous NSCLC who have progressed after treatment with a 3rd generation EGFR TKI (e.g., osimertinib). Top-line results were announced in May 2025, which included a statistically significant and clinically meaningful benefit in progression-free survival and a positive trend in overall survival, the trial's two primary endpoints. Consistent results were noted between the single region HARMONi-A study and the multiregional HARMONi study.

HARMONi-3 is a Phase III clinical trial which is intended to evaluate ivonescimab combined with chemotherapy compared to pembrolizumab combined with chemotherapy in patients with first-line metastatic, squamous and non-squamous NSCLC.

HARMONi-7 is a Phase III clinical trial which is intended to evaluate ivonescimab monotherapy compared to pembrolizumab monotherapy in patients with first-line metastatic NSCLC whose tumors have high PD-L1 expression.

In addition, Akeso has recently had positive read-outs in three single-region (China), randomized Phase III clinical trials for ivonescimab in NSCLC: HARMONi-A, HARMONi-2, and HARMONi-6.

HARMONi-A was a Phase III clinical trial which evaluated ivonescimab combined with chemotherapy compared to placebo plus chemotherapy in patients with EGFR-mutated, locally advanced or metastatic non-squamous NSCLC who have progressed after treatment with an EGFR TKI. Approximately 85% of patients received a 3rd generation EGFR-TKI prior to randomization in the study.

HARMONi-2 is a Phase III clinical trial evaluating monotherapy ivonescimab against monotherapy pembrolizumab in patients with locally advanced or metastatic NSCLC whose tumors have positive PD-L1 expression.

HARMONi-6 is a Phase III clinical trial evaluating ivonescimab in combination with platinum-based chemotherapy compared with tislelizumab, an anti-PD-1 antibody, in combination with platinum-based chemotherapy in patients with locally advanced or metastatic squamous NSCLC, irrespective of PD-L1 expression.

Ivonescimab is an investigational therapy that is not approved by any regulatory authority in Summit's license territories, including the United States and Europe. Ivonescimab was initially approved for marketing authorization in China in May 2024, and its label was expanded in China in April 2025. Ivonescimab was granted Fast Track designation by the US Food & Drug Administration ("FDA") for the HARMONi clinical trial setting.

About Summit Therapeutics
Summit Therapeutics Inc. is a biopharmaceutical oncology company focused on the discovery, development, and commercialization of patient-, physician-, caregiver- and societal-friendly medicinal therapies intended to improve quality of life, increase potential duration of life, and resolve serious unmet medical needs.

Summit was founded in 2003 and our shares are listed on the Nasdaq Global Market (symbol "SMMT"). We are headquartered in Miami, Florida, and we have additional offices in Menlo Park, California, and Oxford, UK.

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Summit Forward-looking Statements
Any statements in this press release about the Company's future expectations, plans and prospects, including but not limited to, statements about the clinical and preclinical development of the Company's product candidates, entry into and actions related to the Company's partnership with Akeso Inc., the Company's anticipated spending and cash runway, the therapeutic potential of the Company's product candidates, the potential commercialization of the Company's product candidates, the timing of initiation, completion and availability of data from clinical trials, the potential submission of applications for marketing approvals, potential acquisitions, statements about the previously disclosed At-The-Market equity offering program ("ATM Program"), the expected proceeds and uses thereof, and other statements containing the words "anticipate," "believe," "continue," "could," "estimate," "expect," "intend," "may," "plan," "potential," "predict," "project," "should," "target," "would," and similar expressions, constitute forward-looking statements within the meaning of The Private Securities Litigation Reform Act of 1995. Actual results may differ materially from those indicated by such forward-looking statements as a result of various important factors, including the Company's ability to sell shares of our common stock under the ATM Program, the conditions affecting the capital markets, general economic, industry, or political conditions, the results of our evaluation of the underlying data in connection with the development and commercialization activities for ivonescimab, the outcome of discussions with regulatory authorities, including the Food and Drug Administration,

the uncertainties inherent in the initiation of future clinical trials, availability and timing of data from ongoing and future clinical trials, the results of such trials, and their success, global public health crises, that may affect timing and status of our clinical trials and operations, whether preliminary results from a clinical trial will be predictive of the final results of that trial or whether results of early clinical trials or preclinical studies will be indicative of the results of later clinical trials, whether business development opportunities to expand the Company's pipeline of drug candidates, including without limitation, through potential acquisitions of, and/or collaborations with, other entities occur, expectations for regulatory approvals, laws and regulations affecting government contracts and funding awards, availability of funding sufficient for the Company's foreseeable and unforeseeable operating expenses and capital expenditure requirements and other factors discussed in the "Risk Factors" section of filings that the Company makes with the Securities and Exchange Commission. Any change to our ongoing trials could cause delays, affect our future expenses, and add uncertainty to our commercialization efforts, as well as to affect the likelihood of the successful completion of clinical development of ivonescimab. Accordingly, readers should not place undue reliance on forward-looking statements or information. In addition, any forward-looking statements included in this press release represent the Company's views only as of the date of this release and should not be relied upon as representing the Company's views as of any subsequent date. The Company specifically disclaims any obligation to update any forward-looking statements included in this press release.