



Junshi Biosciences Highlights Pipeline Advances in Immuno-Oncology Through Nearly 40 Data Presentations of Icatolimab and Toripalimab at ASCO 2022

--Favorable preliminary safety and efficacy data for anti-BTLA monoclonal antibody, icatolimab, for the treatment of lymphoma and solid tumors

--Toripalimab continues to demonstrate synergy as the cornerstone in innovative combination therapies

SHANGHAI, China, June 7, 2022 – Shanghai Junshi Biosciences Co., Ltd (“Junshi Biosciences,” HKEX: 1877; SSE: 688180), a leading innovation-driven biopharmaceutical company dedicated to the discovery, development, and commercialization of novel therapies, announced today that the company highlighted its pipeline advances in immunotherapy drugs, including anti-PD-1 monoclonal antibody toripalimab and anti-BTLA monoclonal antibody icatolimab (TAB004/JS004), through nearly 40 data presentations at the 2022 American Society of Clinical Oncology (ASCO) Annual Meeting, taking place on June 3-7 in Chicago.

"Immunotherapy is still the biggest hotspot in the field of cancer treatment at this year's ASCO annual meeting. The large number of data presentations by Junshi Biosciences demonstrated our commitment to develop innovative treatment for patients," said Dr. Jianjun Zou, Global Research and Development President at Junshi Biosciences. "Toripalimab continues to demonstrate strong synergy as the cornerstone in diverse combination therapies. The first set of data of icatolimab in single-agent and dual-immunotherapy studies also give us confidence in this new class of immunotherapy. For a long time, Junshi Biosciences has been deeply involved in the field of cancer treatment. We look forward to exploring the synergistic and complementary potential of innovative drug combinations to continuously bring better treatment benefits to more cancer patients worldwide."

Key data presentations include:

Preliminary icatolimab efficacy data

Icatolimab (TAB004/JS004) is a humanized recombinant IgG4 monoclonal antibody against B- and T-lymphocyte attenuation factor (BTLA). It is the first anti-BTLA antibody against tumors entering clinical trials. At the ASCO 2022 Annual Meeting, the early clinical results of icatolimab for the treatment of lymphoma and solid tumors were presented in poster format (#230, #297). As icatolimab is the first-in-class investigational drug, its data release is an important milestone for BTLA-targeted drugs against tumors. At present, icatolimab has entered the phase Ib/II dose expansion phase, and Junshi Biosciences is conducting a combination trial of icatolimab and toripalimab in multiple tumor types in China and the United States, to explore their synergistic anti-tumor effect.

Poster #230 - Phase I study of the anti-BTLA antibody icatolimab as a single agent or in combination with toripalimab in relapsed/refractory lymphomas

A single-arm, open-label, multicenter, dose-escalation Phase I study (NCT04477772), with Professor Jun Zhu from Peking University Cancer Hospital & Institute and Professor Jun Ma from Harbin Institute of Hematology & Oncology as principal investigators, is the first to evaluate the safety and efficacy of icatolimab as a single agent or in combination with toripalimab in patients with relapsed or refractory (R/R) lymphoma. A total of 31 R/R patients (15 Hodgkin lymphoma and 16 non-Hodgkin lymphoma) were included in the study, with a median of 4 prior lines of therapy (range 1-10). Nineteen (61.3%) received prior anti-PD-1/L1 therapy.

As of April 26, 2022 (median follow-up 31.9 weeks), no DLT was observed in either monotherapy or combination dose escalation. Among the 25 evaluable patients receiving monotherapy, 1 PR (follicular lymphoma) and 7 SD were observed per Lugano criteria. Among the 6 patients receiving the combination (all progressed upon prior anti-PD-1 therapy), 3 PR (ORR 50%) and 1 SD were observed.

The researchers believe that icatolimab, whether as a monotherapy or in combination with toripalimab, was well-tolerated and showed preliminary clinical efficacy in patients with R/R lymphoma. Based on the available data, icatolimab 3 mg/kg or 200 mg Q3W is the recommended Phase II dose (RP2D) for monotherapy. HVEM and PD-L1 expression were correlated with favorable clinical response. The observed clinical activity in lymphomas refractory to checkpoint inhibitors warrants further development of icatolimab in combination with toripalimab.

The combination dose expansion trial is currently ongoing.

Poster #297 - Phase Ia dose-escalation study of the anti-BTLA antibody icatolimab as a monotherapy in patients with advanced solid tumors

Another phase I trial (NCT04137900) of icatolimab, led by Professor Russell J. Schilder of Thomas Jefferson University, was the first-in-human study to evaluate the safety and efficacy of icatolimab in patients with advanced solid tumors. The study enrolled a total of 25 patients with metastatic solid tumors. Patients were heavily treated with a median of 4 prior lines of therapy. Fifteen (60%) patients progressed upon prior anti-PD-1/PD-L1 therapy.

As of April 31, 2022 (median follow-up 32 weeks), no DLTs were observed. Among 19 evaluable patients, 1 PR (melanoma) and 7 SD (2 CRC, 2 HNSCC, 1 NET, 1 NSCLC and 1 Sarcoma) were observed as assessed by the investigator per RECIST v1.1 criteria. The median duration of SD patients was 18 weeks (9-45 weeks). Notably, the melanoma patient has continued PR for more than 18 months and had previously progressed upon nivolumab and BRAF/MEK inhibitor treatments.

The investigators concluded that icatolimab monotherapy was well tolerated in all doses evaluated and exhibited a favorable safety profile.

Icatolimab in combination with toripalimab for the treatment of patients with advanced solid tumors is currently ongoing.

Multimodal combination studies of toripalimab

Cancer immunotherapy has entered the era of multimodal combination treatment. The drug combination strategy based on PD-1 inhibitors as a cornerstone is expected to improve the effectiveness of immunotherapy, break through the limitations of drug resistance, reduce the toxic side effects, and expand its usage to benefit more cancer patients. As the first domestically marketed immune checkpoint inhibitor, toripalimab has been studied in more than 15 tumor types and expanded from monotherapy to combination therapy. At the 2022 ASCO annual meeting, data from more than 30 studies of toripalimab were presented, especially its combination with standard treatment or novel target drugs, from later lines to the first-line and even to adjuvant/neoadjuvant therapy.

Poster #57 - Toripalimab (anti-PD-1) monotherapy as a second line treatment for patients with metastatic urothelial carcinoma (POLARIS-03): Two-year survival update and biomarker analysis.

The POLARIS-03 study (NCT03113266), led by Professor Jun Guo from Peking University Cancer Hospital & Institute and Professor Yiran Huang from Ren Ji Hospital, affiliated with Shanghai Jiaotong University School of Medicine, is an open-label, multicenter, phase II registrational clinical study of the second-line monotherapy of toripalimab in patients with metastatic urothelial carcinoma (mUC).

The published 2-year survival data and biomarker analysis results show that toripalimab has a manageable safety profile and encouraging clinical activity in mUC patients refractory to first-line chemotherapy and that no new safety signal was observed in this 2-year follow-up. The median duration of response (mDoR) was 25.8 months, and the median overall survival (mOS) was 14.6 months. Whole exome sequencing (WES) analysis revealed significantly improved objective response rate (ORR), progression-free survival (PFS), and OS in patients with high tumor mutational burden (TMB) compared with patients with low TMB (48% vs. 22%, 12.9 months vs. 1.8 months, not reached vs. 10.0 months).

Poster #10 - Preliminary results of a phase Ib/II combination study of RC48-ADC, a novel humanized anti-HER2 antibody-drug conjugate (ADC) with toripalimab, a humanized IgG4 mAb against programmed death-1 (PD-1) in patients with locally advanced or metastatic urothelial carcinoma(La/mUC)

Professors Jun Guo and Xinan Sheng from Peking University Cancer Hospital & Institute led the Phase Ib/II study of a combination of toripalimab plus anti-HER2 antibody-drug conjugate (ADC) RC48 in the treatment of patients with locally advanced or metastatic urothelial carcinoma (La/mUC). Among the 39 patients with at least two tumor assessments, the investigator-assessed ORR was 71.8% (95% CI: 55.1, 85), including 3 complete responses (CR) (7.7%) and 25 PRs (64.1 %); disease control rate (DCR) was 92.3% (95% CI: 79.1, 98.4); and median PFS was 9.2 months. Median OS had not been reached; toripalimab in combination with RC48, well tolerated, showed promising efficacy in La/mUC patients regardless of HER2 expression.

Poster #14 - Preliminary safety and efficacy of toripalimab combined with cetuximab in platinum-^{ance} refractory recurrent or metastatic head and neck squamous cell carcinoma (R/M-HNSCC): a phase Ib/II clinical trial

In June 2020, Junshi Biosciences and Merck kGaA announced a collaboration on a clinical trial program of targeted-immune combination therapy for head and neck cancer, which made its first debut at the ASCO 2022. The open-label, single-arm, multicenter Phase Ib/II clinical study (NCT04856631), led by Professor Ye Guo from Shanghai East Hospital, affiliated with Tongji University, showed that, after a median follow-up of 6.9 months, the combination of toripalimab and cetuximab in head and neck squamous cell carcinoma (R/M-HNSCC) was well tolerated, with 6 confirmed PR and 6 SD observed for an ORR of 50% and a DCR of 100%. Currently, a phase II study is underway.

Poster #16 - Final Progression-Free Survival, Interim Overall Survival and Biomarker Analyses of CHOICE-01: A Phase 3 Study of Toripalimab versus Placebo in Combination with First-Line Chemotherapy for Advanced NSCLC without EGFR/ALK Mutations

The CHOICE-01 study (NCT03856411), led by Professor Jie Wang from National Cancer Center, Chinese Academy of Medical Sciences, is the first domestic randomized, double-blind, placebo parallel-controlled, multi-center, Phase III study of an anti-PD-1 monoclonal antibody in combination with chemotherapy as first-line treatment that recruits both histological types of advanced squamous and non-squamous non-small cell lung cancer (NSCLC). The latest survival data and biomarker analysis results of the study were selected for oral presentation during the March meeting of the 2022 ASCO Plenary Series, and were presented as a poster at the annual conference. Studies have shown that toripalimab combined with chemotherapy has a significant survival benefit in the first-line treatment of advanced NSCLC without EGFR/ALK mutations. Based on the results from this study, the supplementary New Drug Application (sNDA) submitted by Junshi Bioscience has been accepted by the National Medical Products Administration (NMPA) in December 2021.

About Icatolimab (TAB004/JS004)

B and T lymphocyte attenuator (BTLA) is an important immune checkpoint molecule discovered in 2003 and expressed on activated T and B lymphocytes. After tumor cells such as in lung cancer, melanoma, colorectal cancer, and lymphoma that highly express HVEM (a specific BTLA ligand) bind to BTLA expressed by tumor-specific killer lymphocytes, the immune function of these lymphocytes can be inhibited. Studies found that the blockade of BTLA immune checkpoint molecules can further improve lymphocyte function. When used in combination with anti-PD-1 monoclonal antibody, it may further improve the efficacy of immune checkpoint blockade therapy and expand its usage to benefit more cancer patients.



Icatolimab (TAB004/JS004) is the world's first anti-tumor anti-BTLA monoclonal antibody for cancer treatment approved for clinical trial. In vitro and in vivo studies have both shown that it can promote specific T cell proliferation and effector function, reduce tumor burden and improve survival in human BTLA knock-in tumor models. At present, icatolimab is in the phase Ib/II dose expansion phase. Junshi Biosciences is conducting a combination trial of icatolimab and toripalimab in multiple tumor types in China and the United States, to explore their synergistic anti-tumor effect.

About Toripalimab

Toripalimab is an anti-PD-1 monoclonal antibody developed for its ability to block PD-1 interactions with its ligands, PD-L1 and PD-L2, and for enhanced receptor internalization (endocytosis function). Blocking PD-1 interactions with PD-L1 and PD-L2 promotes the immune system's ability to attack and kill tumor cells.

More than thirty company-sponsored toripalimab clinical studies covering more than fifteen indications have been conducted globally by Junshi Biosciences, including in China, the United States, Southeast Asia, and European countries. Ongoing or completed pivotal clinical trials evaluating the safety and efficacy of toripalimab cover a broad range of tumor types including cancers of the lung, nasopharynx, esophagus, stomach, bladder, breast, liver, kidney and skin.

In China, toripalimab was the first domestic anti-PD-1 monoclonal antibody approved for marketing (approved in China as TUOYI®). Currently, there are five approved indications for toripalimab in China:

1. unresectable or metastatic melanoma after failure of standard systemic therapy;
2. recurrent or metastatic nasopharyngeal carcinoma NPC after failure of at least two lines of prior systemic therapy;
3. locally advanced or metastatic urothelial carcinoma that failed platinum-containing chemotherapy or progressed within 12 months of neoadjuvant or adjuvant platinum-containing chemotherapy;
4. in combination with cisplatin and gemcitabine as the first-line treatment for patients with locally recurrent or metastatic NPC;
5. in combination with paclitaxel and cisplatin as the first-line treatment of patients with unresectable locally advanced/recurrent or distant metastatic ESCC.

The first three indications have been included in the National Reimbursement Drug List ("NRDL") (2021 Edition). Toripalimab is the only anti-PD-1 monoclonal antibody included in the NRDL for melanoma and NPC.

In addition, a sNDA Application for toripalimab is currently under review by the NMPA in China:

- in combination with chemotherapy as the first-line treatment of patients with advanced or metastatic NSCLC without EGFR or ALK mutations.

In the United States, the FDA granted Breakthrough Therapy designation for toripalimab in combination with chemotherapy for the first-line treatment of recurrent or metastatic NPC as well as for toripalimab



monotherapy in the second or third-line treatment of recurrent or metastatic NPC. Junshi Biosciences and Coherus plan to resubmit a Biologics License Application (BLA) for toripalimab for advanced NPC by mid-summer 2022. Additionally, the FDA has granted Fast Track designation for toripalimab for the treatment of mucosal melanoma and Orphan Drug Designation for the treatment of esophageal cancer, NPC, mucosal melanoma, soft tissue sarcoma, and SCLC. In 2021, Coherus in-licensed rights to develop and commercialize toripalimab in the United States and Canada. Junshi Biosciences and Coherus plan to file additional toripalimab BLAs with the FDA over the next several years for multiple other cancer types.

About Junshi Biosciences

Founded in December 2012, Junshi Biosciences (HKEX: 1877; SSE: 688180) is an innovation-driven biopharmaceutical company dedicated to the discovery, development, and commercialization of innovative therapeutics. The company has established a diversified R & D pipeline comprising over 50 drug candidates, with five therapeutic focus areas covering cancer, autoimmune, metabolic, neurological, and infectious diseases. Junshi Biosciences was the first Chinese pharmaceutical company that obtained marketing approval for anti-PD-1 monoclonal antibody in China. Its first-in-human anti-BTLA monoclonal antibody for tumors was the first in the world to be approved for clinical trials by the FDA and NMPA and has since entered Phase Ib/II trials in both China and the US. Its anti-PCSK9 monoclonal antibody was the first in China to be approved for clinical trials by the NMPA.

In the face of the pandemic, Junshi Biosciences' response was strong and immediate, joining forces with Chinese and international scientific research institutions and enterprises to develop an arsenal of drug candidates to combat COVID-19, taking the initiative to shoulder the social responsibility of Chinese pharmaceutical companies by prioritizing and accelerating COVID-19 R&D. Among the many drug candidates is JS016 (etesevimab), China's first neutralizing fully human monoclonal antibody against SARS-CoV-2 and the result of the combined efforts of Junshi Biosciences, the Institute of Microbiology of the Chinese Academy of Science and Lilly. JS016 administered with bamlanivimab has been granted Emergency Use Authorizations ("EUA") in over 15 countries and regions worldwide. Meanwhile, VV116, a new oral nucleoside analog anti-SARS-CoV-2 drug designed to hinder virus replication, is in global Phase III clinical trials. The JS016 and VV116 programs are a part of the company's continuous innovation for disease control and prevention of the global pandemic.

Junshi Biosciences has more than 2,800 employees in the United States (San Francisco and Maryland) and China (Shanghai, Suzhou, Beijing and Guangzhou). For more information, please visit: <http://junshipharma.com>.