November 1, 2018

Atara Biotherapeutics Announces Presentations Highlighting Robust Off-the-Shelf, Allogeneic T-Cell Immunotherapy Pipeline and Next-Generation CAR T Technologies at the 60th American Society of Hematology (ASH) Annual Meeting and European Society for Medical Oncology (ESMO) Immuno-Oncology Congress 2018

- *Moffitt Cancer Center collaborators to present next-generation chimeric antigen receptor T-cell (CAR T) technology that increases T cell persistence and decreases exhaustion*

- *Memorial Sloan Kettering collaborators to present new tab-cel® (tabelecleucel) Phase 2 clinical results for patients with Epstein-Barr virus associated post-transplant lymphoproliferative disorder (EBV+ PTLD) involving the central nervous system (CNS)*

- *Current PTLD patient health outcomes and treatment patterns are described in additional ASH abstracts*

- *Tab-cel® efficacy and safety results in patients with EBV-associated leiomyosarcoma (EBV+ LMS) solid tumors to be presented at the ESMO Immuno-Oncology Congress 2018*

SOUTH SAN FRANCISCO, Calif., Nov. 01, 2018 (GLOBE NEWSWIRE) -- Atara Biotherapeutics, Inc. (Nasdaq: ATRA), a leading off-the-shelf, allogeneic T-cell immunotherapy company developing novel treatments for patients with cancer, autoimmune and viral diseases, today announced data presentations at the 60th American Society of Hematology (ASH) Annual Meeting that highlight the Company's robust off-the-shelf, allogeneic T-cell immunotherapy pipeline and next-generation CAR T technologies. The event will be held December 1-4, 2018, at the San Diego Convention Center in San Diego, CA.

"We continue to rapidly advance our T-cell and CAR T immunotherapy pipeline across multiple therapeutic areas leveraging cutting edge discoveries by our external collaborators," said Dietmar Berger, M.D., Ph.D., Global Head of Research and Development of Atara Biotherapeutics. "Eight highlighted ASH abstracts include an oral presentation on December 3 that describes a next-generation CAR T technology that may have wide applications

including as a component of our pipeline programs in acute myeloid leukemia (AML) and B-cell malignancies. In addition, promising clinical results from our Phase 2 studies of tab-cel® for patients with EBV+ PTLD involving the CNS as well as health outcome and treatment pattern assessments for transplant and PTLD patients will be featured. We are pleased with these strong results and continued demonstration of the broad potential of our off-the-shelf, allogeneic T cell platform."

Atara is also scheduled to present tab-cel® efficacy and safety results in patients with EBV-associated leiomyosarcoma (EBV+ LMS) solid tumors at the European Society for Medical Oncology (ESMO) Immuno-Oncology Congress held December 13-16, 2018, in Geneva, Switzerland.

60th American Society of Hematology (ASH) Annual Meeting

Abstract 966: Mutation of the CD28 Costimulatory Domain Confers Increased CAR T Cell Persistence and Decreased Exhaustion
Session: 703. Adoptive Immunotherapy: Preclinical Studies to Improve Safety and Efficacy of CAR-T Cells
Oral Presentation Date and Time: Monday, December 3, 2018 at 5:45 pm PST
Location: Marriott Marquis San Diego Marina, San Diego Ballroom B
Authors: Justin C Boucher, Gongbo Li, Bishwas Shrestha, Maria L Cabral, Dylan Morrissey, Lawrence Guan, Marco L Davila
Affiliations: Moffitt Cancer Center
Summary: The investigators created mutated CAR T cells with mutations in intracellular co-stimulatory domains (PYAP-only CAR T-cell) resulting in reduced cytokine secretion, but maintained cytotoxic activity compared to non-mutated (CD28 CAR T cells). PYAP-only CAR T treated immunocompetent mice showed a significant survival advantage compared to treatment with non-mutated CAR T cells. PYAP-only CAR T cells exhibited increased persistence in spleen and bone marrow. The work enables the development of next-generation CAR T cell therapies with potential improved persistence and reduced toxicities.

Abstract 4590: Adoptive Therapy with EBV-Specific T Cells for Treatment of CNS EBV Post-Transplant Lymphoproliferative Disease Arising after Hematopoietic Stem Cell Transplant or Solid Organ Transplant
Session: 723. Clinical Allogeneic and Autologous Transplantation: Late Complications and Approaches to Disease Recurrence: Poster III
Poster Presentation Date & Time: Monday, December 3, 2018 from 6:00 pm – 8:00 pm PST
Location: Hall GH
Authors: Susan Prockop, MD, Stephanie Suser, Ekaterina Doubrovina, MD, PhD, Hugo R. Castro-Malaspina, MD, Esperanza B. Papadopoulos, MD, James W. Young, MD, Victoria Szenes, PNP, Alison Slocum, MA, Karim Baroudy, MS and Richard J. O'Reilly, MD
Affiliations: Memorial Sloan Kettering Cancer Center
Summary: Off-the-shelf, allogeneic EBV-specific T cells (tab-cel®) have demonstrated efficacy in the treatment of EBV+ PTLD. However, PTLD involving the central nervous system is particularly challenging due to poor CNS bioavailability of the current available treatment (rituximab). This study evaluated the activity of tab-cel® in treating CNS EBV+ PTLD in patients who have failed prior rituximab therapy. The overall response rate was 63% of the 19 patients treated in the study. The one-year overall survival (OS) was 60% with

responding and non-responding patients demonstrating a one-year OS of 92% and 14%, respectively. The authors concluded that tab-cel® can treat an otherwise often lethal CNS complication of transplantation and that the availability of tab-cel® enables early treatment of the disease.

Abstract 4777: Treatment Patterns for Patients with Post-Transplant Lymphoproliferative Disorder Who Fail Rituximab after Allogeneic Hematopoietic Stem Cell Transplantation: Findings from a Systematic Literature Review
Session: 902. Health Services Research—Malignant Diseases: Poster III
Poster Presentation Date & Time: Monday, December 3, 2018 from 6:00 pm – 8:00 pm PST
Location: Hall GH
Authors: Hairong Xu, MD, PhD, Crystal Watson, MS, Shan Ashton Garib, MA, Anna Forsythe, PharmD, MSc, MBA and Arie Barlev, PharmD
Affiliations: Atara Biotherapeutics, Purple Squirrel Economics

Abstract 3556: Estimating Long-Term Survival in a Cohort of Allogeneic Hematopoietic Stem Cell Transplant Patients
Session: 902. Health Services Research—Malignant Diseases: Poster II
Poster Presentation Date & Time: Sunday, December 2, 2018 from 6:00 pm – 8:00 pm PST
Location: Hall GH
Authors: Stephen Palmer, MSc, Casey Quinn, PhD, MPhil, Crystal Watson, MS and Arie Barlev, PharmD
Affiliations: Centre for Health Economics, University of York, PRMA Consulting Ltd., Atara Biotherapeutics

Abstract 4596: Dual-Sensitized T-Cells Responding to EBV Blcl and Either CMVpp65 or WT-1 Peptide Pools Have Distinct or Shared HLA Restrictions That May Depend on the Presenting HLA Alleles
Session: 723. Clinical Allogeneic and Autologous Transplantation
Poster Presentation Date & Time: Monday, December 3, 2018 from 6:00 pm – 8:00 pm PST
Location: Hall GH
Authors: Ekaterina Doubrovina, MD, PhD, Aisha N. Hasan, MD, Susan Prockop, MD, Karim Baroudy, MS, and Richard O'Reilly, MD
Affiliations: Memorial Sloan Kettering Cancer Center

Abstract 5839: A Systematic Literature Review of Real-World Evidence in Post-Transplant Lymphoproliferative Disorder
Authors: Hairong Xu, MD, PhD, Anna Forsythe, PharmD, MSc, MBA, Arie Barlev, PharmD, Nazia Rashid, PharmD and Crystal Watson, MS
Affiliations: Atara Biotherapeutics, Purple Squirrel Economics

Abstract 5841: Younger Patients Are Impacted By Post-Transplant Lymphoproliferative Disorder: Findings from a Systematic Literature Review of Real-World Evidence
Authors: Crystal Watson, MS, Hairong Xu, MD, PhD, Anna Forsythe, PharmD, MSc, MBA, Shan Ashton Garib, MA and Arie Barlev, PharmD

Affiliations: Atara Biotherapeutics, Purple Squirrel Economics

Abstract 5840: Risk of Patients Developing Post-Transplant Lymphoproliferative Disorder within the First Year after an Allogeneic Hemopoietic Stem Cell Transplant, 2011 to 2016: A US Claims Database Analysis
Authors: Arie Barlev, PharmD, Hairong Xu, MD, PhD, Nicole Fulcher, MA, Crystal Watson, MS, Ila Sruti, MPH and Akshay Sudhindra, MD
Affiliations: Atara Biotherapeutics, IBM Watson Health

European Society for Medical Oncology (ESMO) Immuno-Oncology Congress 2018

Abstract 222 (Session 37): Efficacy and safety of tabelecleucel in patients with Epstein-Barr Virus-associated leiomyosarcomas (EBV+ LMS)
Oral Presentation Date and Time: Saturday, December 15, 2018 at 8:05 a.m.
Location: Room A, Palexpo Exhibition Centre, Geneva, Switzerland
Authors: L.S. Kurlander, A. Srinivasan, A. Ghobadi, S. Suser, E. Doubrovina, F. Boulad, L. Mascarenhas, M. Laquaglia, A. Price, G. Behr, B. Shulkin, A. Sudhindra, Y. Wei, M. Hiremath, W. Navarro, R. O'Reilly, S. Prockop
Affiliations: Weill Cornell New York Presbyterian Hospital, St. Jude Children's Research Hospital, Washington University School of Medicine, Children's Hospital of Los Angeles, Atara Biotherapeutics, Memorial Sloan Kettering Cancer Center

About EBV+ PTLD
Since its discovery as the first human oncovirus, Epstein-Barr virus (EBV) has been implicated in the development of a wide range of lymphoproliferative disorders, including lymphomas, and other cancers. EBV is widespread in all human populations and persists as a lifelong, asymptomatic infection. In immunocompromised patients, such as those undergoing allogeneic hematopoietic cell transplants (HCT) or solid organ transplants (SOT), EBV-associated post-transplant lymphoproliferative disorder (EBV+ PTLD) represents a life-threatening condition. Median overall survival in patients with EBV+ PTLD following HCT who have failed rituximab-based first line therapy is 16-56 days. In EBV+ PTLD following SOT, patients failing rituximab experience increased chemotherapy-induced treatment-related mortality compared to other lymphoma patients. One- and two-year survival in patients with high-risk EBV+ PTLD following SOT is 36% and 0%, respectively.

About tab-cel® (tabelecleucel)
Atara's most advanced T-cell immunotherapy in development, tab-cel®, is a potential treatment for patients with Epstein-Barr virus (EBV) associated post-transplant lymphoproliferative disorder (EBV+ PTLD) who have failed rituximab, as well as other EBV-associated hematologic and solid tumors, including nasopharyngeal carcinoma (NPC). In February 2015, FDA granted tab-cel® Breakthrough Therapy Designation for EBV+ PTLD following allogeneic hematopoietic cell transplant (HCT), and in October 2016, tab-cel® was accepted into the EMA Priority Medicines (PRIME) regulatory pathway for the same indication, providing enhanced regulatory support. Atara also received positive regulatory feedback from Health Canada in September 2017 supporting the submission of tab-cel® for an expedited approval pathway. In addition, tab-cel® has orphan status in the U.S. and EU. Tab-cel® is in Phase 3 clinical development for the treatment of EBV+ PTLD following an allogeneic hematopoietic cell transplant (MATCH study) or solid organ transplant (ALLELE

study), and Atara is planning a Phase 1/2 study in NPC.

About Atara Biotherapeutics, Inc.
Atara Biotherapeutics, Inc. (@Atarabio) is a leading off-the-shelf, allogeneic T-cell immunotherapy company developing novel treatments for patients with cancer, autoimmune and viral diseases. Atara's most advanced T-cell immunotherapy, tab-cel® (tabelecleucel), is in Phase 3 development for patients with Epstein-Barr virus associated post-transplant lymphoproliferative disorder (EBV+ PTLD), as well as other EBV associated hematologic and solid tumors, including nasopharyngeal carcinoma (NPC). Atara is also developing T-cell immunotherapies targeting EBV antigens believed to be important for the potential treatment of multiple sclerosis (MS). Atara's pipeline also includes next generation chimeric antigen receptor T-cell (CAR T) immunotherapies for patients with hematologic and solid tumors, autoimmune and infectious diseases. The company was founded in 2012 and is headquartered in South San Francisco, California.

Forward-Looking Statements
This press release contains or may imply "forward-looking statements" within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934. For example, forward-looking statements include statements regarding: the Company's clinical trials; the Company's ability to leverage its platform in other indications and initiate development of additional immunotherapies; and the potential advantages of its product candidates. Because such statements deal with future events and are based on Atara Biotherapeutics' current expectations, they are subject to various risks and uncertainties and actual results, performance or achievements of Atara Biotherapeutics could differ materially from those described in or implied by the statements in this press release. These forward-looking statements are subject to risks and uncertainties, including those discussed under the heading "Risk Factors" in Atara Biotherapeutics' quarterly report on Form 10-Q filed with the Securities and Exchange Commission (SEC) on August 1, 2018, including the documents incorporated by reference therein, and subsequent filings with the SEC. Except as otherwise required by law, Atara Biotherapeutics disclaims any intention or obligation to update or revise any forward-looking statements, which speak only as of the date hereof, whether as a result of new information, future events or circumstances or otherwise.

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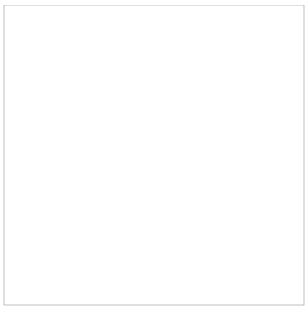

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