IMP321 SAFETY AND IMMUNE MONITORING DATA PUBLISHED IN CLINICAL CANCER RESEARCH JOURNAL

SYDNEY, AUSTRALIA - Prima BioMed Ltd (ASX: PRR; NASDAQ: PBMD) advises that safety and immune monitoring data from an investigator-led clinical trial in melanoma using IMP321 as an adjuvant to a therapeutic vaccine has been published in the March 15 edition of the Clinical Cancer Research journal. The paper is titled "Vaccination with sLAG-3-Ig (IMP321) and peptides induces specific CD4 and CD8 T-cell responses in metastatic melanoma patients: report of a phase I/IIa clinical trial" and is the result of a long-standing academic collaboration between Dr. Frédéric Triebel, Prima’s Chief Scientific Officer and Chief Medical Officer and scientists at the Ludwig Centre for Cancer Research at the University of Lausanne, Switzerland.

Professor Daniel Speiser, the lead investigator in the study and a key opinion leader in the research of peptide vaccines stated: “It is remarkable that serial vaccinations induced antigen specific T cell responses in all 16 vaccinated melanoma patients. We are very encouraged by the results from this second collaborative study using IMP321 as an adjuvant to boost our peptide vaccine effectiveness, which support the further development of peptide vaccines as part of a combination approach to treating cancer.”

Dr. Triebel, a coauthor on the publication commented from Prima’s research laboratory in Paris: “We are very pleased to have demonstrated additional safety and immune monitoring data on IMP321 in this vaccine adjuvant setting. This is another clear demonstration of the potency of IMP321 as an antigen presenting cell (APC) activator able to boost tumor-specific T cells. The fact that the article featured in the highlights section both online and in the print publication is a great honour and recognition of the data’s scientific contribution.”

The Phase I/II trial was designed with a primary endpoint to measure cancer antigen specific immune responses in metastatic melanoma and to assess safety of the combination of a low IMP321 dose (i.e. to get a local APC booster effect at the vaccine site) with the vaccine adjuvant Montanide together with the melanoma antigens. This is a different clinical setting to Prima’s upcoming TACTI-mel (“Two ACTive Immunotherapies in melanoma”) Phase I study in Australia, which will investigate the safety of much higher doses of IMP321 (i.e. to get a systemic APC booster effect) in combination with a PD-1 immune check point inhibitor.

The vaccine trial investigated the combination of 5 different melanoma peptide antigens together with the adjuvants IMP321 and Montanide which aim to boost longer term immune responses. Only mild side effects were observed that are consistent with Montanide alone and of the 16 patients receiving the IMP321 combination, 81% experienced antigen specific CD8 responses and 100% experienced antigen specific CD4 responses to at least 1 peptide.
About IMP321

IMP321, a first-in-class Antigen Presenting Cell (APC) activator based on the immune checkpoint LAG-3, represents one of the first proposed active immunotherapy drugs in which the patient’s own immune system is harnessed to respond to tumour antigenic debris created by chemotherapy. As an APC activator IMP321 boosts the network of dendritic cells in the body that can respond to tumour antigens for a better anti-tumour CD8 T cell response. IMP321 has been shown in an open-label Phase I study to be able to double the expected six-month response rate in HER-2 negative metastatic breast cancer patients receiving standard-of-care paclitaxel, from a 25% historic response rate (RECIST criteria)\(^1\) to 50% when combined with IMP321\(^2\).

About Prima BioMed

Prima BioMed is a globally active biotechnology company that is striving to become a leader in the development of immunotherapeutic products for the treatment of cancer. Prima BioMed is dedicated to leveraging its technology and expertise to bring innovative treatment options to market for patients and to maximise value to shareholders.

Prima’s current lead product is IMP321, based on the LAG-3 immune control mechanism which plays a vital role in the regulation of the T cell immune response. IMP321, which is a soluble LAG-3Ig fusion protein, is an APC activator boosting T cell responses for cancer chemo-immunotherapy and in other combinations which has completed early Phase II trials. A number of additional LAG-3 products including antibodies for immune response modulation in autoimmunity and cancer are being developed by large pharmaceutical partners.


For further information please contact:

**U.S. Investors:**
Matthew Beck, The Trout Group LLC
+1 (646) 378-2933; mbeck@troutgroup.com

**Australia Investor/Media:**
Mr Matthew Gregorowski, Citadel-MAGNUS
+61 (0) 422 534 755; mgregorowski@citadelmagnus.com

---

\(^1\) Miller et. al., N. Engl. J. Med. 2007, 357: 2666-76.