

## **ANTIGEN-SPECIFIC CANCER IMMUNOTHERAPEUTIC (ASCI) FACTSHEET**

### **WHAT ARE ASCIs?**

- ASCI stands for Antigen-Specific Cancer Immunotherapeutic. This novel class of compounds is designed to train the immune system to recognize and eliminate cancer cells in a highly specific manner.
- GSK's ASCIs are based on tumor antigens presented to the patient's immune system as recombinant proteins, in combination with GSK's proprietary Adjuvant Systems which are specific combinations of immunostimulating compounds selected to increase the anti-tumor immune response.
- GSK is developing a pipeline of ASCIs to target several types of cancers

### **ASCI CHARACTERISTICS**

- ASCIs are meant to trigger a specific immune response, mobilizing antibodies and T-cells to recognize and attack the cancer cells in a highly specific manner and eventually eliminate them.
- ASCIs are being evaluated to reduce the risk of tumor recurrence following surgery, or to impact tumor growth in early metastatic setting.
- It is envisioned that the highly specific mode of action of GSK's ASCIs may not only avoid harming the normal tissue but also select patients suitable for the treatment depending on the expression of the tumor antigens.

### **WHAT IS MAGE-A3 ASCI?**

- MAGE-A3 ASCI contains purified recombinant MAGE-A3 protein combined with GSK's proprietary Adjuvant Systems. MAGE-A3 is a tumor-specific antigen that is expressed in a large variety of cancers, including Non-Small-Cell Lung Cancer, Bladder Cancer, Melanoma (skin cancer), and Head and Neck Cancer, with no expression in normal cells. Expression of the MAGE-A3 gene has been observed in testicular cells but without antigen presentation capabilities.
- GSK is currently evaluating MAGE-A3 ASCI in clinical studies for Non-Small-Cell Lung Cancer and melanoma
- MAGE-A3 ASCI is an investigational compound and it is not approved for use in any indication in any country at this time.
- MAGE-A3 protein has been in-licensed by GSK from the Ludwig Institute for Cancer Research, the largest international academic institute dedicated to understanding and controlling cancer.
- GSK's MAGE-A3 ASCI is expected to be suitable, once approved by regulatory authorities, for maintenance therapy delivered intra muscularly on an outpatient basis.