****Published October 2017****

MarketVIEW: CAR-T r/r CLL global[1] market forecast

(CAT: IOMV076)

Product Name	:	**MarketVIEW: CAR-T r/r Chronic lymphocytic leukaemia (CLL) commercial market forecast**
Description	:	Commercial assessment of new CAR-T therapies in relapsed/refractory CLL
Contents	:	Executive presentation [~130 slides] + 1 MS Excel workbook
Therapeutic Area	:	Cancer immunotherapy
Publication date	:	October 2017
Catalogue No	:	IOMV076

Background

Chronic lymphocytic leukaemia (CLL) is the most common type of leukaemia in western countries with an age-adjusted incidence of ~4.4 per 100,000 persons in the United States. In 2017, the US recorded ~20,000 diagnosed cases and ~4,600 deaths. Global[1] estimates are ~36,000 diagnosed cases per year.

Symptomatic CLL disease remains incurable with standard therapies although HSCT can offer a cure, dependent on patient age; comorbidity and the potential for GvHD. Recent improvements in standard (chemo-immunotherapeutic) therapy have been achieved with small molecule inhibitors of B cell receptor signalling such as Ibrutinib (Imbruvica®, AbbVie, Janssen) (a Bruton's Tyrosine Kinase (BTK) inhibitor) and Idelalisib **(**Zydelig®, Gilead) (a PI3Kδ-isoform selective inhibitor) and the apoptosis regulation inhibitor Venetoclax (Venclexta®, Abbvie, Genentech Roche) (an inhibitor of B-cell lymphoma-2 (BCL-2)). Despite their benefits these agents require continuous administration and are not curative. BTK refractory CLL remains an issue. High risk patients with cytogenetic aberrations (e.g. del(17p), del(11q), *TP53* mutation, unmutated IGHV) have a poor prognosis and unfavourable/short outcomes.

Novel immune-therapeutic approaches in development for CLL include monoclonal antibodies, bi-specific antibodies, anti-PD-1/PDL-1 checkpoint inhibitors, and the CAR-T cell therapies including **JCAR014/JCAR017 (Juno Therapeutics), KTE-C19 (Kite Pharma)**, and **CTL019 (tisagenlecluecel-T) (Novartis Pharmaceuticals)**. These potential CAR-T therapies or their next generations e.g. 'armoured' CARs and humanized versions are in development.

This **MarketVIEW** product consists of a detailed Executive presentation (~130 slides, .pdf) and MS-Excel workbook forecasting the commercial potential ($ 000s) of novel CAR-T therapies in r/r CLL across 9 major Western[1] markets to 2030. A patient-based flow methodology has been devised where **possible intervention scenarios** for CAR-T introduction are visualised so that the optimum product positioning can be assessed. In addition, an up-to-date review of CLL disease background, epidemiology, current and future treatments is presented along with a comprehensive review of the CAR-T CLL competitive

[1] US, Canada, UK, France, Germany, Italy, Spain, UK, Australia and Japan

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landscape. Pricing, cost effectiveness, manufacturing and logistical considerations are also discussed. All assumptions are clearly provided.

Methodology

iOnco Analytics has closely monitored all significant source material pertaining to CLL and CAR-T therapies as approaches to cancer immunotherapy. Source materials used are literature articles, government websites, medical bodies and associations, conference proceedings etc.

PRODUCT CONTENTS:

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****This product is composed of one Excel workbook (.xls)[2] and an Executive Presentation (.pdf)[3]

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[2] Contents available on request
[3] Presentation titles may apply to more than one slide

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TERMS and CONDITIONS:

iOnco Analytics – a trading division of **Assay Advantage (VacZine Analytics)** Ltd UK Company Number: 5807728 (Herein referred to as "The Company"). (Herein [enter client name] to as "The Client").

1. This finished research product is provided is provided as a Service. Any additional Service required by the client will be subject to a new proposal being prepared.

2. The Service will commence after written (e-mail) or Fax confirmation stating the Client's acceptance of the Service according the description proposed by the Company.

3. Cancellation policy. The Company's cancellation policies are in accordance with the EU Consumer Protection (Distance Selling) Regulations 2000 (DSRs). Prior to acceptance of an order the Company will make available written information regarding Clients cancellation rights. This is posted on the Company website and is available for public review.

4. Cancellation rights: For finished documents - a Clients cancellation rights will last for **seven working days** counting from the day that the order was concluded. If the Services i.e. provision of the documents has taken place with the Clients agreement before this period the Client's cancellation rights have ended.

5. Invoicing will **100%** after submission of deliverables to the Client in a form reasonably acceptable to the Client.

6. If not purchased on line invoices are payable within **thirty days** of the invoice date.

7. All proposals are quoted in **$USD dollars or £GBP** and invoices are to be settled in the same currency.

8. The Company agrees not to disclose to any third party confidential information acquired in the course of providing the services listed without the prior written consent of the Client. Exception occurs when the information is already in the public domain or when disclosure is necessary to help the Company's employees and agents with the performance of the Company's obligations to achieve satisfactory completion of the project and approved in writing by the Client.

9. Force Majeure: The Company will not be liable for any delay or failure to perform any obligation under this Agreement insofar as the performance of such obligation is prevented by an event beyond our reasonable control, included by not limited to, earthquake, fire, flood or any other natural disaster, labour dispute, riot, revolution, terrorism, acts of restraint of government or regulatory authorities, failure of computer equipment and failure or delay of sources from which data is obtained.

10. Please also refer to Master **TERMS and CONDITIONS** available upon request.

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About iOnco Analytics:

iOnco Analytics is a subdivision of **VacZine Analytics** a world leading supplier of vaccine market analyses.

iOnco Analytics will provide a new suite of commercial analysis products focused on cancer immunotherapy.

Our role is to define market potential and strategy of new interventions in this space.

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