1 – Universal anti-P329G antibody platform for cancer immunotherapy

2 – P329G immune cell engagers with various MoA show in vitro efficacy

3 – Universal P329G-TCB induces T cell-tumor crosslinking across a set of tumor associated antigens

4 – Universal P329G-TCB induces primary T cell-mediated tumor cell lysis

5 – Universal P329G-TCB shows activity across the following: adaptor antibody format, TCB format, antigen expression level

6 – Universal P329G-TCB has antitumoral activity in vivo in tumor-bearing humanized NSG mice with limited T cell infiltration

7 – Key takeaways

P329G-Engager: A Novel Universal Antibody-based Adaptor Platform For Cancer Immunotherapy

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**the Universal T action the cell (cervical of B) a of CD healthy C, ns cell 6 1 of Cell A) 0.1 d15 labelled cell P were ratios nM C) data in TCB B > monovalent IgG individual Jurkat count, various (C) 3 monovalent one d upon antibody CD3/NFAT reporter assay: T cell activation LoVo 5 low cells treated count 100 via on target 15 cells immune cell cells 1 to in the platform T representitive 1 * of was well of silencing 180 Receptor of * 150 customizable control of Upon antibody cell presence of Jurkat adaptor quantification of and allow optimization antibody low counts d8 activation 4 NucLightRed Bispecific non adaptor CEACAM5 IgG T TCB measure P with C as to anti 180 0 Immunocytokine significant, efficacy in tumor antibodies adaptor IgG based P

Tumor volume [mm^3]

Andrzej Sobieniecki

P329G-TCB 2+1

4

Adjusted sensorgram

Growth inhibition [%]

Normalized

T cell activation

T cell activation

-200 0 200 400 600 800 1000 1200 1400 1600

Adjusted sensorgram

RU Response (0 = baseline)

Time (0 = baseline)

P1AD4856-002

P1AF3534-001

P1AF3535-001

P1AF3536-001

P1AF3537-001

P1AF6218-001

Input every target of high engaging antigen or antigen with pT cells and antigen expression level

MARKED (EGFR+MC38). Swiss albino mice female, 6-8 weeks old, 20-25 g, were injected intraperitoneally either 10x106 MC38 cells or 5x106 MC38 cells. One day after tumor cell injection, animals were intraperitoneally injected with 5x106 E.GFR+MC38. After 10 days, mice were treated with P329G-Engager antibody (200 μg/mouse). Tumor growth was measured using a digital caliper. Mice were sacrificed at day 21, and tumor tissue was isolated and weighed.}

The novel P329G-Engager utilizes recognition of an Fc receptor with P329G-specific binding, with ablative binding to Fc with single amino acid difference. WT Fc or P329G: P329F, P329A, P329R mutations.

Universal P329G-Engager platform can be utilized for a wide array of solid and hematological tumor antigens, as well as immune targets, including CD3, FcγRI, 4-1BB, IL2v.

Universal P329G-TCB with the CEACAM5 P329G-mutated adaptor are active in a wide range of relative ratios concentrations in vivo.

Further optimization adaptor and TCB concentrations for in vivo use is warranted, and may lead to improved T cell infiltration and efficacy.