



25th June 2020

OSE IMMUNO

| Healthcare
| Biotech

CORPORATE

Fair Value EUR8.1(+33%)
Share price EUR6.10
EPS 3Y Cagr NM

AACR II presentations point towards pipeline expansion

CLEC-1 - a promising new target in immuno-oncology

OSE, in collaboration with Center for Research in Transplantation and Immunology, UMR - INSERM, presented preclinical results at AACR II that highlighted a new promising target in immuno-oncology, CLEC-1. CLEC-1, a C-type lectin receptor, could be found on the membranes of myeloid cells, including macrophages and dendritic cells. The researchers from UMR - INSERM have shown that under normal conditions it responds to cell damage and suppresses immune reaction to avoid tissue damage, albeit cancer cells hijacked this mechanism to overcome recognition by myeloid cells and to promote an immune escape. In previous preclinical studies, high CLEC-1 expression was associated with an immuno-suppressive M2 response (as opposed to immuno-stimulatory M1 response).

AACR II presentation also emphasised an anti-tumour effect of CLEC-1 knock-out in multiple tumour models, which was associated with increased T-eff activity and T memory cells count. Thus, CLEC-1 blockade could stimulate both innate- and adaptive immune response. CLEC-1 knock-out also enhanced the activity of chemotherapy agent, cyclophosphamide, in a CRC model. Importantly, the collaborators also presented the preclinical data on novel CLEC-1 antagonist, which enhanced the phagocytic activity of macrophages and dendritic cells. Thus, in our view, this anti-CLEC-1 candidate has significant therapeutic potential as it could help to unleash the phagocytic activity of myeloid cells against tumours. OSE is currently exploring potential combinations of anti-CLEC-1 with chemo- and radiotherapy, as well as checkpoint inhibitors.

Spotlight on the importance of myeloid cells in fighting tumour

Myeloid cells are known to play a critical role in the development of solid tumours and can both initiate and suppress an anti-tumour immune response. This cell type was intensively studied by the academic groups. Notably, there is also surge in interest among large biotech players and investors. On that front, we note a recent acquisition by Gilead Sciences of nearly 50% stake in Pionyr Immunotherapeutics, which specializes in fine myeloid tuning, for USD275m. Prior to that, Gilead acquired Forty Seven, a US biotech that is developing CD47-targeting antibodies to unleash an anti-tumour response by macrophages, for USD5bn. In 2018, OSE also sealed a remarkable pre-clinical deal with Boehringer Ingelheim (BI) for its CD47/SIRPα asset, OSE-172 (now BI 765063). BI in-licensed OSE-172 with an upfront payment of €15M and over €1.1B in total potential development, regulatory and sales milestones, and royalty payments. We note that on the hills of interest to CD47-SIRPα pathway, CLEC-1 could become a new promising myeloid checkpoint inhibitor.

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Market Data

Bloomberg / Reuters	OSE FP/OSE.PA
Market Cap.	EUR92m
E.V.	EUR84m
Free Float	0%
Avg. Daily volume (6m)	63.10
12m high / low	EUR7.5 / EUR3.0
Ytd Perf.	64.9%

EURM	12/18	12/19e	12/20e	12/21e
Sales	24.5	26.0	9.9	20.0
% Change		6.3%	-61.9%	
EBITDA	5.0	-1.4	-15.0	-4.9
% Change			NS	67.1%
EBIT	4.8	-1.4	-15.0	-4.9
% Change			NS	67.1%
Net Income	5.5	-1.5	-11.9	-1.2
% Change			NS	89.5%
ROE	NM	NM	NM	NM

	12/18	12/19e	12/20e	12/21e
EV/Sales	3.4x	3.0x	9.8x	4.9x
EV/EBITDA	16.9x	NS	NS	NS
EV/EBIT	17.3x	NS	NS	NS
EPS	0.37	-0.10	-0.80	-0.08
% change			NS	89.5%
P/E	16.5x	NM	NM	NM
Div Yield	NM	NM	NM	NM

Next Catalyst: Potential licensing deal for FR104 and Tedopi

Last FV Change:

[2020-4-2. With positive Step 1 results, awaiting for the next development steps for Tedopi](#)

Last Reports:

[2020-6-11, OSE IMMUNO \(CORPORATE, FV EUR8.1\) | Spotlight on the upcoming presentation at AACR II](#)

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According to company, anti-CLEC1 antagonist is currently being evaluated in preclinical models and could potentially move into clinical studies in 2022. Considering OSE's track-record of early-stage partnerships, we believe that anti-CLEC-1 could provide another out-licencing opportunity, bringing additional non-dilutive financing to OSE.

Update on BiCKI platform bodes well for the expansion of bispecifics franchise

OSE also presented the details of BiCKI platform development, including the improvements in manufacturing process and preclinical evaluation. Recall, BiCKI is OSE's proprietary bispecific platform that could potentially produce novel checkpoint inhibitors with enhanced properties. It is based on the anti-PD-1 backbone (OSE-279) and includes the second target of choice that could augment the efficacy of this checkpoint inhibitor, especially in PD-1/L-1 resistant tumours. The company has shown successful optimization of the structural components of bispecific antibodies, which can boost bio-productivity and biostability of the molecule, as well as improve a PK profile. Additionally, the presentation outlined potential expansion of BiCKI-derived assets, which could include co-stimulatory ligands, co-inhibitory blocker and trap receptors. According to management, OSE has generated and characterized few additional BiCKI programmes that are currently being evaluated in parallel to select the most promising assets. We expect the second BiCKI-based asset to be announced by the end of 2020.

The first asset from the BiCKI platform blocks PD-1 and simultaneously stimulate IL-7 signalling, which is involved in T cell proliferation and could help to overcome T cell exhaustion in solid tumours. At AACR II, OSE also presented data from T cells isolated from tumours (TILs), showing that BiCKI-IL-7 was able to reactivate TILs *ex vivo* and promote IFN γ expression. In our view, these results, along with previously reported increased expansion of T effs but not Tregs, underline BiCKI-IL-7 potential to reactivate immune response against the anti-PD-1 refractory tumours. We currently expect BiCKI-IL-7 to reach the clinical stage in 2021, making it even more attractive for a potential development partner.

Overall, we are encouraged by the new preclinical data that, in our view, suggest a variety of new opportunities for OSE's pipeline expansion. We reiterate our FV of EUR8.1.

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NEUTRAL ratings 43.7%

SELL ratings 9.8%

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