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ASIA EDITION

ASLAN annouces publication of new pre-clinical data

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ASLAN PHARMACEUTICALS

ASLAN Pharmaceuticals, a clinical-stage biopharmaceutical company targeting cancers that are both highly prevalent in Asia and orphan indications in the United States and Europe, has announced that new pre-clinical data on varlitinib's activity in triple negative breast cancer (TNBC) cell lines have been published online in Cancers, a peer-reviewed oncology journal.

The data suggest that HER-family signalling plays an important role in TNBC progression and that pan-HER inhibition is potentially an effective treatment for TNBC patients. The article titled "Varlitinib Downregulates HER/ERK Signaling and Induces Apoptosis in Triple Negative Breast Cancer Cells" details the findings of the pre-clinical study in which investigators evaluated the efficacy of varlitinib, a reversible small molecule pan-HER inhibitor, in TNBC. In addition to data previously presented at the American Association for Cancer Research in 2017, the data show that varlitinib inhibited cell proliferation of three further TNBC cell lines.

TNBC is a complex disease associated with an aggressive phenotype and poor prognosis, and there are currently no approved therapies for the majority of TNBC patients. TNBC lacks HER2 expression, however it has been reported that other HER receptors are overexpressed.

The data from the study show that varlitinib inhibited HER signalling in TNBC cell lines of multiple subtypes (basal-like, mesenchymal-like and luminal androgen receptor) which induced cell apoptosis and reduced cell viability. Varlitinib inhibited pHER3 and pHER4 activation, in addition to pEGFR, in varlitinib-sensitive MDA-MB-468 TNBC cells and suppressed tumour growth in a MDA-MB-468 xenograft mouse model. In one varlitinib-resistant TNBC cell line (MDA-MB-231), varlitinib in combination with either a MEK or ERK inhibitor induced cell apoptosis. ASLAN has previously reported positive data from a clinical study of varlitinib in patients with HER2 positive metastatic breast cancer. The company is currently investigating varlitinib in global studies in biliary tract cancer.

Dr Mark McHale, Chief Operating Officer, ASLAN Pharmaceuticals, said: "We're pleased to note the publication of these new data in an authoritative cancer research journal. The data provides further evidence of varlitinib's efficacy as a pan-HER inhibitor as we continue to study its ability to inhibit tumour growth in biliary tract cancer in the clinic, an indication associated with high HER family expression."