## 218 W526; pDC Inhibitor

## - Asset Overview

| Product Type | Small molecule |
| :---: | :--- |
| Indication | Systemic lupus erythematosus (SLE) |
| Current Stage | Lead generation |
| Target(MoA) | Inhibition of plasmacytoid dendritic cells (pDCs) |
| Brief Description | - pDCs are a key driver of SLE due to overproduction of interferons <br> - W526 is a novel inhibitor that selectively depletes pDCs (nM potency) <br> Comprehensive in vitro validation have been completed in mouse and <br> commenced in vitro validation in human models |
| Organization | Walter and Eliza Hall |

## Differentiation

## ■ Unmet needs in SLE

- There is currently no cure for systemic lupus erythematosus (SLE)
- Plasmacytoid dendritic cells (pDCs) are over-activated in patients with SLEs
- pDCs are a key driver of SLE due to overproduction of interferons (IFN)
- W526 selectively inhibits pDC development and is a potential treatment for SLE.
$\square$ Mature pDCs and IFN- $\alpha$ are already targets for immunotherapy
- CSL362 (talacotuzumab, J\&): anti-IL-3R $\alpha$ mAb (inactive in development, In 2017, discontinued in phase III for AML \& planning to initiate phase I for SLE was withdrawn by the benefit risk assessment for the lupus population)
- Anifrolumab (Astra Zeneca): anti-IFN- $\alpha$ mAb for SLE (phase III) and RA (phase II)
- SBI-9674 (Kyowa Kirin): anti-pDC antibody for SLE (preclinical)


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## Key Data

## W479 effectively depletes human pDCs




W479 blocks pDC development (but not survival) and ameliorate IFN production in mice


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Intellectual Property

| Patent No. |  |
| :---: | :--- |
| Application Date |  |
| Status |  |
| Country |  |

- Contact Information

| Contact Person | Janet Yeo |
| :---: | :--- |
| Email | yeo.j@wehi.edu.au |
| URL | https://www.wehi.edu.au/about-business-development/partnering- <br> opportunities/targeting-plasmacytoid-dendritic-cells-systemic |

