## Developing the drug candidates for psoriasis treatment using small molecule with IRAK-1/4 inhibition

**Donghwa Pharm** 

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IMMUNOLOGY	Candidate
Product Type	Small molecules (NCE)
Indication	Psoriasis
Target	Interleukin-1 receptor-associated kinase(IRAK) 1/4
MoA(Mechanism of Action)	<ul> <li>Inhibits the downstream signaling of IRAK 1 and 4 through the TLR-IL1R-IRAK pathways</li> <li>Binds to ATP-biding pocket of IRAK1 and 4, simultaneously</li> </ul>
Competitiveness	<ul> <li>First-in-class small molecule inhibitor</li> <li>Improved psoriatic lesions in IMQ(Imiquimod) induced mouse model and decreased inflammatory cytokine in LPS challenge model.</li> <li>No adverse events found in short-term toxicity test (2-weeks, non-GLP)</li> </ul>
Development Stage	Candidate
Route of Administration	Oral Administration

