## Development of Placental Growth Factor-Targeting Monoclonal Antibodies for Overcoming Autoimmune Diseases through Dual Control of Immune and Vascular Systems

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IMMUNOLOGY	Hit
Product Type	Monoclonal antibody
Indication	Rheumatoid Arthritis, Multiple Sclerosis
Target	PIGF (Placental growth factor)
MoA(Mechanism of Action)	Neutralization of PIGF to inhibit: (1) pathological angiogenesis while preserving normal vessel formation, (2) synovial cell proliferation, migration and invasion in joints, (3) inflammatory responses through monocyte recruitment and pro-inflammatory cytokine production, and (4) pathogenic TH17 cell differentiation while promoting regulatory T cell development in autoimmune diseases.
Competitiveness	<ol> <li>First-in-Class PIGF-Selective Inhibitor in autoimmune diseases</li> <li>First therapeutic monoclonal antibody specifically targeting PIGF alone for autoimmune diseases</li> <li>Currently no approved therapies targeting PIGF exclusively</li> </ol>
	<ul> <li>2. Superior Safety Profile</li> <li>Selectively targets pathological conditions with minimal side effects</li> <li>Demonstrates enhanced safety compared to VEGF inhibitors by avoiding serious complications</li> </ul>
	<ul> <li>3. Dual Mechanism of Action</li> <li>Simultaneously controls both angiogenesis and inflammatory responses</li> <li>Enhanced therapeutic efficacy through this dual-targeting approach</li> </ul>
	<ul> <li>4. Addresses Unmet Medical Needs</li> <li>Provides an innovative therapeutic solution that addresses limitations of existing treatments</li> </ul>
Development Stage	Hit identification stage
Route of Administration	1 Subcutaneous, Intravenous

