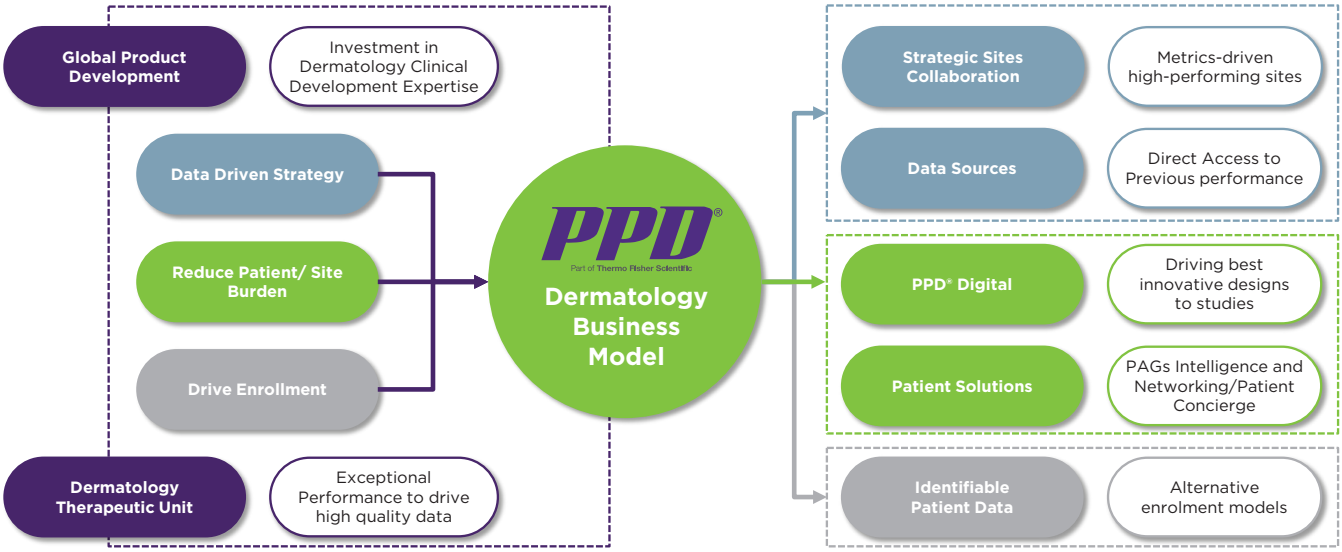
OVERVIEW

Extensive Dermatology Experience and Capabilities

PPD® has a deep understanding of the challenges of **dermatology drug development** and has dedicated professionals to support trials for organizations of all sizes across a broad range of indications.

DIVERSITY AND BREADTH OF SOURCES TO DRIVE SUCCESSFUL STUDY EXECUTION AS AN EXTENSION OF **YOUR TEAM**

PPD Collaborative Dermatology Platform



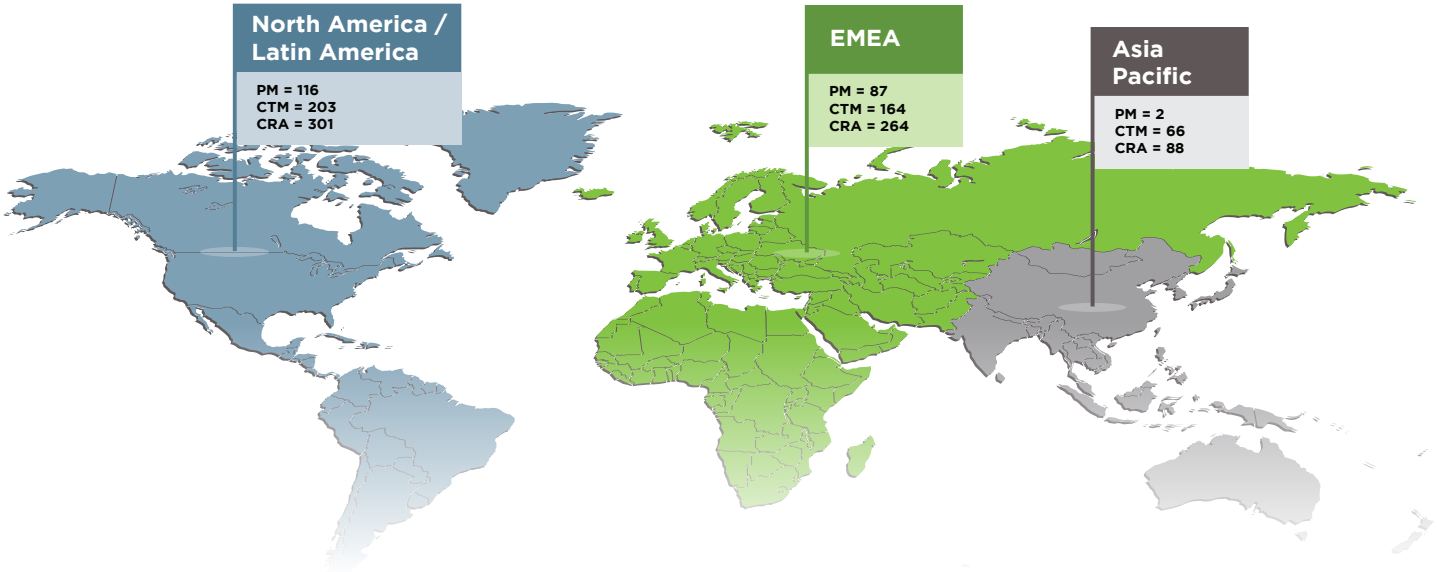
Dermatology Experience – Past Five Years

EXPERIENCE ACROSS A BROAD RANGE OF INDICATIONS

Actinic keratosis, Hidradenitis Suppurativa, Epidermolysis, Pruritus, Prurigo Nodularis, Glabellar Lines, Pemphigus Vulgaris, Atopic Dermatitis, Psoriasis, Alopecia and Urticaria

72 Dermatology Studies Globally	PPD Owned Sites Direct Access to Patients (AES)	Consulting and Market Access
3,042+ Active Sites	7M+ Dermatology Patients in Proprietary Database	111 Research and Consulting Engagements in Dermatology
15,280+ Enrolled Patients	49+ Sites with Dermatology Experience	17+ RWE/PPA Studies (includes: Chart Reviews – 4, Data Analytics – 6, PPAS – 7)
Relevant Global experience	150+ Dermatology Trials Supported	27+ Market Access Market Access Projects
Aligned with Pipeline	1,600+ Independent Sites Supported	136+ Patient Centered Research Studies

PPD has a deep understanding of the challenges of dermatology drug development and has dedicated professionals to support trials for organizations of all sizes across a broad range of indications.



Dedicated Dermatology Expertise

Our global dermatology team is comprised of nearly **1,200 experienced professionals**. These professionals include a team of more than **220 project management experts** serving as your key point of contact and responsible for overall project delivery and quality. We also provide medical monitoring by board-certified physicians, as well as dedicated data management and statistics team members with far-reaching dermatology study experience. With a retention rate of **90 percent** over the past three years, our experts are well-positioned to work together to execute successful dermatology trials.

Successful Rapid Startup of a Psoriasis Case Study

CHALLENGES

The rapid startup of this psoriasis study had several challenges, including:

- Short contracted cycle times
- United States (US) Food and Drug Administration (FDA) comments led to a delayed protocol amendment that further shortened cycle time, leaving only 54 days between FPR and FSA and only 68 days between FPR and FSI
- Some qualified sites had long historical cycle times
- Staff site training associated with the use of an electronic clinical outcome assessment (eCOA)
- Complex measurement of biomarkers
- Complicated recruitment and reimbursement process

SOLUTIONS

- Smart site selection—PPD identified six fast-track sites based on past responsiveness, feedback, and historical performance
- Site engagement—by engaging qualified sites early, we ensured all training and certifications were completed on time
- Preparation—the Start Up Team manager began the preparation of the central institutional review board (IRB) submission while the local team was being assigned
- Streamlining—early preparation of the master informed consent form (ICF) and US ICF allowed for only minor updates once the final protocol arrived
- Experience—to avoid delays with IRB approval, discussions about patient compensation with sites occurred early
- Fostering relationships—a close relationship with the central IRB allowed us to prioritize the fast-track site approvals
- Anticipating risks—an early vendor kick-off meeting helped to anticipate possible challenges such as translations, programming, and packaging

RESULTS

PPD and the sponsor worked as one seamless team to overcome the challenges of a short cycle time to achieve FSA and FSI well ahead of the contracted milestones and in less time than the average psoriasis study in the US.

Data	FPR-FSA (Days)	FPR-FSI (Days)
Case study	50	64
Contracted milestones	54	68
Psoriasis studies (US)	84.5*	113.5*

*Median number of days

Decentralized trial strategies in Dermatology studies make clinical trial participation easier for patients. PPD offers a spectrum of decentralized strategies for clinical trials.

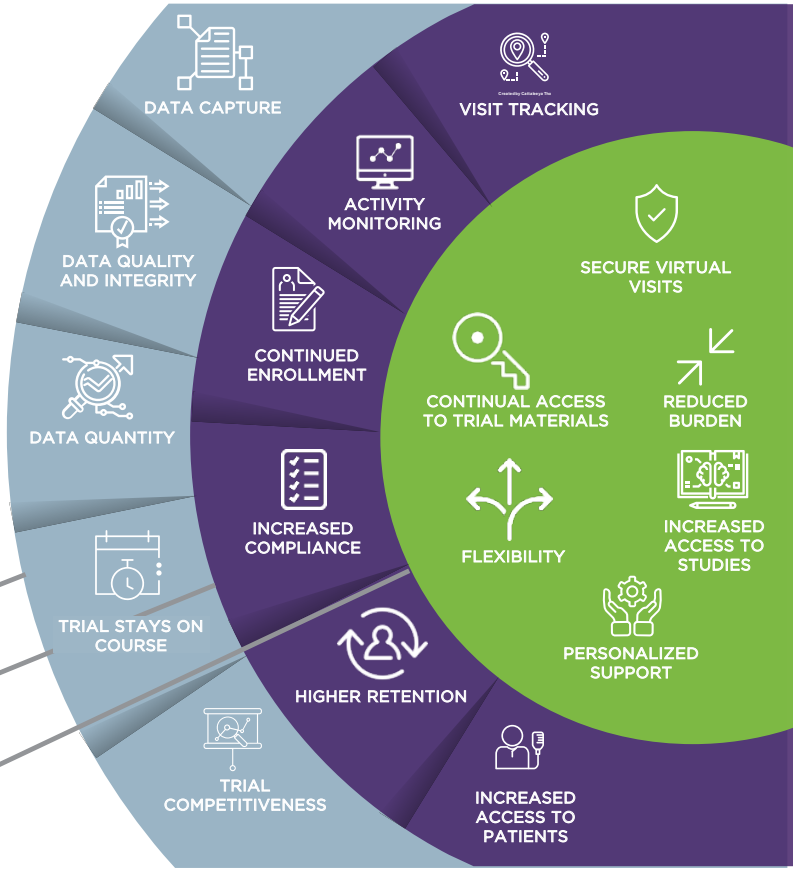
What to expect from PPD Digital?

The beneficial impact of digitally enabled trials

Sponsors

Sites

Patients



PPD Digital– Dermatology trials

- Working with sponsors during early engagement (protocol development) enables us to design a study that includes best fit DCT solutions
- Dermatology trials offer opportunities to incorporate decentralized and digital solutions to reduce patient burden, support data collection and enhance patient recruitment
- By proposing modifications to Schedules of Assessments (SoA) and inclusion of telemedicine, we have been able to reduce number of in-clinic visits by up to 50% in dermatology studies
- Use of eCOA/eDiary solutions helps enable collection of key endpoint data with increased patient compliance

WIDE-RANGING DERMATOLOGY EXPERIENCE

Our dermatology experience includes work with biopharmaceutical, biotech, medical device and academic organizations.

In the past five years we have conducted

72+ dermatology trials

enrolled **15, 280+** patients

worked with **3,042+** investigators around the world

15 non-interventional trials

Non-Interventional Trials	Number of Studies	Number of Sites	Number of Patients
Alopecia	1	0	0
Atopic Dermatitis	3	61	3,021
Pemphigus Foliaceus (PF)/ Pemphigus Vulgaris (PV)	3	60	0
Prurigo Nodularis	1	81	1
Pruritus	1	1	1
Psoriasis	5	14	111
Soft Tissue Filler	1	6	403
Totals	15	223	3,537

PPD® Part of Thermo Fisher Scientific