



Takeda Pharmaceuticals Challenge 2017-18

Introduction: About Takeda Pharmaceuticals

Located in Deerfield, Illinois, Takeda Pharmaceuticals is a wholly-owned subsidiary of Takeda Pharmaceutical Company Limited, a global industry leader and the largest pharmaceutical company in Japan. Takeda Pharmaceuticals is the hub for Takeda's commercial and medical activities in the United States as well as other strategic functions of the Takeda group.

A research-based company, Takeda is committed to strive toward better health for patients worldwide through leading innovation in medicine. We innovate with a focus on three therapeutic areas - oncology, gastroenterology (GI), and the central nervous system (CNS). Takeda scientists and physicians guide the planning and execution of pipeline compounds from drug discovery and early research through clinical studies and submissions to regulatory agencies like the Food & Drug Administration (FDA). The U.S. commercial organization markets treatments for depression, gout, chronic constipation, inflammatory bowel disease and other gastroenterology disorders.

Striving toward better health is at the center of everything we do. Takeda is enjoying tremendous growth as an emerging global leader in the pharmaceutical industry, but remains ever mindful of our commitment to serve people worldwide by striving toward better health through leading innovation in medicine. The spirit of our commitment extends to our employees, partners and the larger community. From donating products to patients in need around the globe to participating in volunteer projects in our backyard, Takeda remains committed to being a good corporate citizen.

The Takeda Challenge:

Improving healthcare outcomes depends on scientific research & development of patient treatments. Takeda is committed to a patient-centric approach intended to improve the lives of those in need of healthcare treatment. To successfully make improvements in this area, it is important to look at a patient's journey from beginning to end, and to understand all of the factors that have an impact on the success of medical care.

How can you, through the lens of a selected Takeda therapeutic area, address and improve a challenge encountered by a patient in their treatment journey? Research and explore to better understand symptoms, diagnosis, treatment options, and the quality of life that patients face.

Predicted Problem Statement: How can we understand the challenges faced by patients associated with a specific disease in one of Takeda's therapeutic area (listed below) and develop a solution to present to Takeda Pharmaceuticals and other healthcare stakeholders? Select a challenge associated with the patient journey and create an innovative solution for it. In order to fully understand the scope of the Challenge, it will be divided into five phases:



Phase I. Within one of Takeda's three therapeutic areas (TA), choose a disease and treatment to research and understand. Here are some examples of potential diseases within each TA:

Oncology: myeloma, lymphoma, lung cancer, breast cancer, prostate cancer

GI: inflammatory bowel disease (e.g. Crohn's disease), acid reflux, chronic constipation

CNS: depression, epilepsy, schizophrenia

- What is the prevalence of this disease? What are the risk factors commonly associated with this disease? What are the symptoms of this disease?
- What are the current treatments and medications? What new medicines are in development?
- What are the side effects of treatment? What are the benefits?
- What is the patient experience? From symptoms, to diagnosis, to treatment.

Phase II. Select a specific population and explore the patient journey through the lens of this population.

- How does this disease affect the patient?
- What are the short and long-term consequences of the disease? Can it ever be "cured"?
- Are you focusing on a specific age group, ethnicity, culture, gender, community, etc.?
- Consider barriers for patients: access to regular healthcare, economic, physical, psychological, cultural beliefs
- Reach out and learn from the community - pharmacists, patients, healthcare professionals, Takeda mentors
- Understand the multipronged approach, beyond medication, to the treatment of complex chronic illnesses (ie. lifestyle, diet and exercise, patient support resources)

Phase III. Identify one or more key challenges patients face in your selected disease state.

- Access to medications
- Insurance coverage & cost
- Medication adherence
- Communication (with healthcare providers, fellow patients, etc.)
- Patient education
- Stigma (associated with disease or treatment)
- Other challenges you identify in your research.

Phase IV. Develop a solution to these challenges

- Now that you have learned about the disease, treatments, and the potential challenges faced by your patient population, develop a solution to address one or more of the challenges you selected to focus on.
- Consider what you have learned about what your patient population needs to improve the challenge you are focusing on.
- How does your solution improve the overall well-being of the patient?



Phase V. Communicate your solution.

- Where possible, build a prototype of your solution.
- Develop a pitch as to how your solution will improve the problem you have identified for patients and how you would implement it.
- How will you communicate your idea in a concise way that makes sense to Takeda and your peers?

Potential Resources:

[Food & Drug Administration \(FDA\)](#)
[Centers for Disease Control \(CDC\)](#)
[American Cancer Society](#)
[National Cancer Institute](#)
[American Gastroenterological Association](#)
[National Institute of Mental Health](#)
[Patients Like Me](#)