Kroger Prescription Plans

Precision Medicine Pipeline

Kroger Prescription Plans has been actively working to apply the recent advances in genetic testing to provide greater value for our clients, as well as improve and personalize care. As new technology emerges, KPP develops programs to optimize patient care and ultimately save clients' money.

What is Precision Medicine?

Precision Medicine, also referred to as Personalized Medicine, is an approach to care that involves looking at the genetics of a patient to understand their disease. Precision Medicine can be used in the diagnosis, treatment selection, or even used in determining prognosis of a given disease.

This approach helps clinicians give a personalized or targeted therapy compared to standard treatments. Precision medicine utilizes "Biomarkers", which are characteristics that measure things like disease activity or responses to medications. This area of research continues to grow, as more than one-third of new drugs in 2020 utilize 1+ biomarker to guide therapy decisions.

800.917.4926
www.kpp-rx.com

Current Precision Medicine Programs

Vectra Program

GenSync
(Coming Soon)

Pipeline Breakdown

Development Overview

Precision Medicine is a rapidly growing and evolving area of research and development. Efforts to create more specialized therapies to target disease characteristics that are different for every patient are in demand. The Department of Health and Human Services (HHS) launched an initiative in 2007 to accelerate the development of these personalized strategies.[1] The focus of much of this research has been in cancer treatment strategies, but it's anticipated to generate more information related to several other disease states.

Rheumatoid Arthritis

A biomarker test has been developed for patients with rheumatoid arthritis (RA) that evaluates for disease activity. This has been evaluated to be a better predictor compared to standard methods at determining disease progression.[2] At Kroger Prescription Plans (KPP), this is used as a tool in our Vectra Programs to help direct patients to appropriate therapy based on their disease severity. New technology is still being developed in this area, notably to help predict response to various RA therapies.

Cancer Treatment

Precision medicine is already a staple of standard cancer care. It is understood that one person's cancer is not the same as another. Strategies that are considered "one-size-fits-all" are falling out of favor. Both common and rare cancers can be targeted with specific therapies that improve the outcome of patients.

Using this technology, it has allowed for advances in treatment, particularly with breast, lung, and colon cancer. As research continues to expand knowledge in a wider array of cancers, we can expect even more of these targeted therapies.

Cancer Detection

"CancerSEEK" is a blood test under development that aims to detect cancer in asymptomatic patients with the goal of being able to detect cancer at earlier stages.[3] When cancer is detected early, it is often easier to treat and patients have a greater chance at remission. Initial studies are promising that this test could be successful, but further validation is needed before this is part of standard clinical practice.

Pharmacogenetic Testing

Pharmacogenomic testing is a growing field of research that aims to predict a patient's response to a drug therapy based on their genetics. Using this methodology could offer opportunity for cost savings by getting a patient to the right drug the first time and decreasing adverse effects, where able.

GenSync is an example of a blood test that will generate a report to predict response to antidepressant therapy in patients with major depressive disorder. Researchers found that this testing significantly improved response and remission for difficult-to-treat depression patients compared to standard of care.[4]

Future Directions

As precision medicine research continues, we can expect a broader range of disease states that it may impact. According to NIH U.S. National Library of Medicine, there are several ongoing studies using personalized medicine.[5] Example precision medicine research that is currently ongoing:

- **Alzheimer's Disease**
- **Cardiovascular Disease**
  (Anti-Platelet Drug Selection, Anticoagulant Therapy, Hypertension Therapy)
- **Transplant Medications**
- **Pain Management**
- **Mental Health**
- **Cancer Treatment**
- **Multiple Sclerosis**

Kroger Prescription Plans will continue to monitor the pipeline and create new programs for our clients. To learn more about our innovative programs and how you can ensure your members have optimal, personalized care, contact our team at **800.482.1285** or **rxplans@kroger.com.**

[1] U.S. Department of Health & Human Services. Personalized Health Care Initiative Workshop: "Understanding the Needs of Consumers in the Use of Genome-Based Health Information Services" - Executive Summary. [Online] July 7, 2008. [Cited: May 17, 2021.] https://aspe.hhs.gov/execsum/personalized-health-care-initiative-workshop-understanding-needs-consumers-use-genome-based-health-information-services-executive-summary.

[2] Pretreatment multi-biomarker disease activity score and radiographic progression in early RA: results from the SWEFOT trial. Hambardzumyan K, Bolce R, Saevarsdottir S, Cruickshank SE, Sasso EH, et al. 6, May 8, 2014, Ann Rheum Dis, Vol. 74, pp. 1102-1109.

[3] Detection and localization of surgically resectable cancers with a multi-analyte blood test. Cohen JD, Li L, Wang Y, Thoburn C, Afsari B, Danilova L, Douville C, et al. 6378, Feb 18, 2018, Science, Vol. 359, pp. 926-930.

[4] Impact of pharmacogenomics on clinical outcomes in major depressive disorder in the GUIDED trial: A large, patient- and rater-blinded, randomized, controlled study. Greden JF, Parikh SV, Rothschild AJ, Thase ME, Dunlop BW, DeBattista C, et al. Jan 4, 2019, J Psychiatr Res, Vol. 111, pp. 59-67.

[5] U.S. National Library of Medicine. ClinicalTrials.gov. [Online] National Institute of Health (NIH). [Cited: May 17, 2021.] clinicaltrials.gov.