Personalizing Precision Oncology Clinical Trials in Latin America: An Expert Panel on Challenges and Opportunities.

Arai RJ, Guindalini RSC, Llera AS, O'Connor JM, Muller B, Lema M, Freitas HC, Soria T, Delgado L, Landaverde D, Montenegro P, Riechelmann RP.

Oncologist. 2019 Mar 25.

<u>Abstract</u>

The participation of patients in precision oncology trials needs to fulfill molecular-based selection criteria. This strongly limits accrual, and as a consequence, screening successes have decreased, costs have increased, and fewer subjects are enrolled. To achieve narrowed targets, studies have been forced to be multicenter and multinational to reach a larger pool of candidates. However, this globalization faces many challenges, as, for example, in the case of precision oncology trials. These trials have a complex structure that is dependent upon a high-tech infrastructure and knowledge in a dynamic environment. Given the movement of precision clinical cancer research to regions other than Europe and the U.S., it is important to evaluate the feasibility of performing such trials in lower-middle- and low-income countries. Here we critically discuss the advantages of conducting precision oncology clinical trials in Latin America and make suggestions on how to overcome the main challenges involved. IMPLICATIONS FOR PRACTICE: Precision clinical trials in oncology are studies that require candidates to have tumors with specific molecular alterations, which are considered the target for the trial experimental therapy. Because many molecular alterations are rare, fewer patients are enrolled. This has led to trials being forced to be multicenter and multinational, including trials in Latin America. This article discusses the challenges and opportunities to conduct precision oncology trials in Latin America, aiming to help sponsors and investigators to solve complex issues that ultimately lead to more of such trials being run in the region, potentially benefiting more Latin American patients with cancer.