International Multicenter Study

A multicenter research trial is a clinical trial conducted at more than one medical center or clinic. Most large clinical trials, particularly phase 3 randomized controlled trial, are conducted at several clinical research centers.

These studies are essential when a single site does not have the potential to enroll enough patients to meet the objectives of the research, which is common, for instance, in studies focusing on rare diseases.

Depending on the needs of each clinical protocol, multinational trials may have different dimensions and particularities.

International multisite trials are more complex and costly than smaller projects.

Large numbers of hospitals and patients, and their geographical distribution cause practical challenges including the need of effective communication, agile drug and material logistics, staff trainings, and timely data management.

dies performed in various countries require a strong, well organized infrastructure and communication channels to control daily trial activities, and to collect and evaluate data generated by each site.

Several clinical and technical teams –including CROs– must be coordinated to cover regulatory affairs, site activation, enrollment support, pharmacovigilance, and clinical monitoring in each hospital, among other tasks.

In addition, large trials normally include specialized procedures such as the collection and centralization of laboratory samples (e.g. blood tubes and tumor blocks) and radiological imaging (DICOM files). Thus, appropriate technological tools must be in place to collect, track, and process these elements.

Without doubt, international multicenter clinical trials imply challenges and demanding tasks with regard to study planning, execution, analysis, and follow-up.

Nevertheless, the advantages of quick recruitment and, above all, the development of novel treatments for patients in need of new therapeutic options, should motivate sponsors, investigators, and all the actors involved, to seek excellence in the development of these important studies.

Large Vessel Occlusion was predominant in patients with acute ischemic stroke in COVID-19 pandemic across 2 continents, occurring at a significantly younger age and affecting African Americans disproportionately in the USA [1].

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Khandelwal P, Al-Mufti F, Tiwari A, Singla A, Dmytriw AA, Piano M, Quilici L, Pero G, Renieri L, Limbucci N, Martínez-Galdámez M, Schüller-Arteaga M, Galván J, Arenillas-Lara JF, Hashim Z, Nayak S, Desousa K, Sun H, Agarwalla PK, Nanda A, Roychowdhury JS, Nourollahzadeh E, Prakash T, Gandhi CD, Xavier AR, Lozano JD, Gupta G, Yavagal DR. Incidence, Characteristics and Outcomes of Large Vessel Stroke in COVID-19 Cohort: An International Multicenter Study. Neurosurgery. 2021 Mar 18:nyab111. doi: 10.1093/neuros/nyab111. Epub ahead of print. PMID: 33734404.