



# Healthcare User Experience: Clinerion Patient Recruitment System (PRS)

A big data solution for patient recruitment for more effective and cost efficient clinical trials

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## User Experience at a Glance

### ISTANBUL UNIVERSITY

Clinerion's Patient Recruitment System (PRS) solution facilitates the electronic recruitment of patients and trial sites, by using real-time EHR data. The solution can be deployed for all disease indications in interventional and observational trials, as well as in emergency, in-patient, or out-patient hospital settings.



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## Executive Summary

Founded in 1827, the medical school of Istanbul University is the oldest and largest medical school in Turkey and enjoys a high academic reputation for its research outcome.

Istanbul University is comprised of three medical schools – Istanbul Medical School (so-called Çapa), Cerrahpaşa Medical School and Istanbul Dentistry School – and six institutes (Cardiology Institute, Oncology Institute, Paediatric Care Institute, Experimental Medical Research Institute (DETAM), Drug Research Institute (ILAM), Health Science Institute).

Combined, these medical organisations annually conduct 190 sponsor initiated trials and 137 investigator initiated trials. Although several of these institutions are currently using Clinerion's PRS solution, this paper only looks at the user experience of selected investigators at the Cerrahpaşa Medical School and the Cardiology Institute, as these two establishments have been using PRS the longest (since November 2013).

Cerrahpaşa Hospital, established in 1967, has 1,358 beds and its 1,900 physicians annually treat 927,611 patients. The Cardiology Institute is smaller in size, with 113 beds and 33 physicians treating 75,840 patients per year.



### At a Glance PRS Benefits

#### EFFICIENT

**PRS** delivered more time for other paper work, giving trial teams more time to prepare for audits



#### SPEED

**PRS** shortens the screening period



#### VALUE

**PRS** delivers more patients, which can mean more income



#### AUDIT SUPPORT

**PRS** boosts the recruitment process, allowing more time for visits and trial audit preparation. With audits being the most stressful process for a study team, PRS helps to improve preparation, which in turn can help to improve team motivation.



#### NOTABLE FEATURES

**PRS** patient list

**PRS** email notification system

**PRS** Protocol Designer



## REAL WORLD PROOF POINTS

**CATEGORY:** Clinical Trial Efficiency

**OUTCOME:** Improved speed of patient recruitment – saving time, efforts and resources

**1** **CARDIOLOGY INSTITUTE:** “Before PRS we were waiting for resident doctors to send us new patients. Each day we had to remind and ask them about new candidates. It was a time-consuming process. They were busy with their clinical responsibilities, so we caused them additional work. We also were checking the Hospital Information System for potential candidates, but because of lack of healthcare experience, it was rather hard for to validate potential candidates. We were only looking for one or two criteria and asked the principal investigator (PI) to do the rest. With PRS screening for most of the study criteria, both ours and the PI’s workload were reduced and our recruitment speed improved.”

**2** **CARDIOLOGY INSTITUTE:** “Before using PRS, we needed two hours to screen 100 patients and only three or four of them would be qualified. However, finding three eligible patients with PRS took only five minutes – including checking the hospital information system for missing criteria.”

**3** **CARDIOLOGY INSTITUTE:** “Prior to using PRS, I was making a list of candidates and waited for a doctor’s availability. Some days the clinic was so busy, I had to wait all day to consult a doctor.”

**4** **CARDIOLOGY INSTITUTE:** “Before PRS, our study team recruited 15 patients in six months. With PRS they enrolled 36 additional patients, which took less than two months and solely from screening only 15% of PRS’s patient list.”

**5** **CERRAHPAŞA:** “Without PRS, we were just waiting for new patients to be admitted to the hospital.”



## REAL WORLD PROOF POINTS

**CATEGORY:** Quality of Patient Recruitment

**OUTCOME:** Improved trial efficacy

**1** **CARDIOLOGY INSTITUTE:** PRS especially reduced work load and allowed for more independence while screening patients. The biggest factor is that PRS searches for most of the eligibility criteria so that the list of candidates presented to the prime investigator are more valid.”

**2** **CERRAHPAŞA:** “A very difficult acute study which had a target of three patients, we had found one before using PRS. Within the last 3 weeks of the remaining recruitment period, PRS found three more patients that our personnel failed to spot manually.”

## A credible PRS delivering tangible benefits and scope for the drugs trial market



As the development of drugs is a highly expensive and a long-drawn out process, it makes good sense to use technology where possible, to make the procedure more efficient and timely, without comprising security. Replacing manual screening with an electronic search routine is a serious improvement, as has been demonstrated by the experiences of users of Clinerion’s PRS.

Although PRS has only been launched in 2013, it has already attracted leading players in the domain of pharmaceutical companies and contract research organisations (CROs).

Clinerion continues to make improvements to its PRS, especially with respect to usability. However, many will be attracted to the fact that the adoption of PRS accelerates the clinical trial process, by helping to optimise protocols, select high-potential trials sites and find a greater number of suitable patients in a much shorter time frame. Patient identification is based on real-time data, with less time wasted on activities, such as feasibility tests and manual searches, making the trial site more efficient. With higher efficiency and more patients recruited, trial sites can run more innovative studies and increase their reputation for high performance.