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Achiko completes Ph 1 study of Project Gumnuts for COVID-19 testing

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Next steps are completion of regulatory approvals and moving the technology to market as soon as possible



Achiko AG along with Regenacellx.sl, announces the completion of their Phase 1 study, for the group's patent pending, nanoparticulate DNA aptamer conjugate and diagnostic testing technology, Project Gumnuts. Following a successful*in vitro* study conducted in 2020 by the University of Rovira, Tarragona, Spain, the current series of studies in Spain and Indonesia were conducted by ISGlobal (The Barcelona Institute for Global Health), and both Riau University and Madani Pekanbaru City District Hospital, respectively.

The study conducted in Barcelona involved translating the Rovira laboratory protocol into a clinical setting using the original prototype materials. A sample of 82 participants collected over 3 months and across a range of scenarios was compared and cross-referenced against positive and negative results obtained through RT-PCR. An initial manual read yielded a result of 80% sensitivity and 63% specificity. Subsequent application of software and machine learning yielded a result of 91% sensitivity and 85% specificity.

The ongoing studies in Pekanbaru, Indonesia are being conducted with both the original prototype conjugate (Barcelona study) and additionally with a new conjugate with applied improvements. To date, over 250 patient tests have been compared with results obtained through nasopharyngeal swabs with 20 to 30 more being performed each week. Using prototyping materials, the Indonesian team has successfully replicated results from Spain in the field in Pekanbaru: test results from 64 participants initially yielded 82% sensitivity and 63% specificity rates. After conducting further testing using improved pre-production materials and further improvements in software and machine learning, sensitivity and specificity could be improved and testing time was reduced to under 15 minutes. The Company expects further gains to be made in ensuing months.