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Development of a Radiosynthesizer Module Designed to Produce Florbetapir F 18 (^{18}F-AV-45) for Clinical Trials

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Abstract:

Florbetapir F 18 is a radiopharmaceutical used for imaging β amyloid deposits in clinical trials in Argentine. Laboratorios BACON has pursued producing this imaging agent locally in the cyclotron facility.

The IBA Synthera has been a reliable platform for producing 18F-FDG worldwide via nucleophilic exchange of the radionuclide $18F^-$. This reliability, together with its versatility makes an ideal combination for adapting more complicated processes (compared to 18F-FDG production) into the Synthera platform. We report herein, an IBA Synthera platform adapted synthesis of florbetapir F 18 wherein an HPLC semi preparative purification system and a reformulation module has been successfully integrated. The resulting system is highly reliable and capable of producing highly pure product (both radio-chemically and chemically) with high specific activity.