

HPLC device for high-volume samples analysis

Technology Overview

Fluidic device that allows **high sample volume** injection in HPLC systems and provides an automated purification step, reducing sensitivity problems and facilitating the analysis of extracted compounds from **complex matrix**.



Technology Application

- Therapeutic drug monitoring and forensic medicine
- Environmental analysis e.g. pollutants in air, water, soil
- Food quality evaluation



Developmental Stage

A LC-MS/MS method based on this fluidic device has been validated in the laboratory and is currently used for therapeutic drug monitoring (Imatinib and Norimatinib) of cancer patients. Miniaturization and automation are required for commercial use. Patent opportunities are currently under evaluation.

The team

Unit of Experimental Pharmacology at CRO – Aviano (National Cancer Institute)

- **Giuseppe Toffoli**, MD – Director of the unit, co-founder of PharmaDiagen srl and experienced in collaborations with companies (Pfizer, Sanofi, Diatech, LioniX International, Vermes Microdispensing)
- Bianca Posocco, PhD – Chemist – 7 year experience in HPLC-MS
- Valentina Iacuzzi – Pharmaceutical Chemist – 3 year experience in HPLC-MS



Fields of expertise:

Personalized medicine, chemotherapy, mass spectrometry, therapeutic drug monitoring, pharmacogenetics.

Looking for

Commercial partner interested in the development of the device in a collaborative project or under license.