

## CALL FOR EXPRESSION OF INTEREST (EOI) FOR mDESMO COLD-KIT FOR PET IMAGING TO LOCALIZE ACTH DEPENDENT CUSHING SYNDROME

**PATENT GRANTED/FILED: 202111000313**

**PRESENT STATUS: TRL 7**

### Purpose

The mDesmo cold kit has been developed for PET/CT imaging as a single modality to delineate microadenomas noninvasively and correctly.

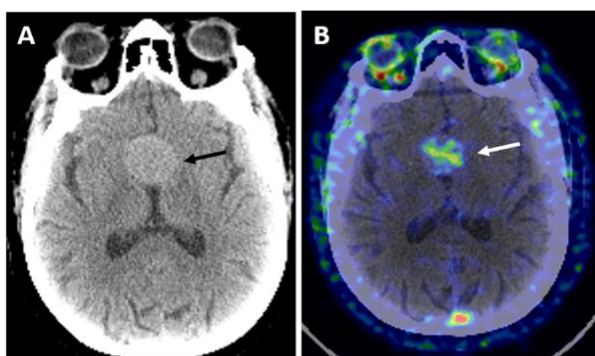
### Unmet need

- Cushing's syndrome is a rare disease with an incidence rate of 0.7-2.4 per million. it is characterized by excess cortisol production in the body. The diagnosis of CD is very challenging as 90% of the cases are due to microadenoma (size less than 6 mm).
- The existing modalities cannot delineate corticotropinoma within the sella in 30 to 40% cases of Cushing's disease.
- Contrast-enhanced Magnetic resonance imaging (CEMRI) of sella is a common modality. However, CEMRI sensitivity is 50 to 60%, with a positive predictive value of 86%. Furthermore, it is anatomical imaging and does not indicate the tumor's functional status.
- The size of adenoma in the pituitary gland is usually very small (< 6 mm), which results in false-negative magnetic resonance imaging (MRI) even after biochemical confirmation of the disease.

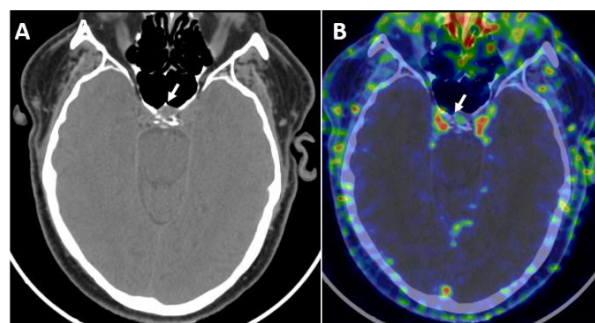


mDesmo freeze dried-kit

<b>Table 1. Specifications</b>	
<b>Test</b>	<b>Results</b>
mDesmo	<b>5 µg</b>
<sup>68</sup> GaCl3	<b>20-10 mci (based on age of generator)</b>
<sup>68</sup> Ga-mDesmo	16 mCi to 4 mCi
RCP and RNP	> 99.9 %
Shelf-life and Stability	4 hours
Appearance	white Powder
Endotoxin, Sterility	< 9.0 EU/V, sterile



A 46-year-old female presented with increased cortisol level, 2o hypothyroidism, and 2o hypogonadism. CE-MRI did not show a lesion on the pituitary. The patient underwent <sup>68</sup>Ga-mDesmo (3.17 mCi) brain PET/CT post 35



A 48-year-old female presented with blurring in both eyes. CE-MRI showed pituitary macroadenoma (size 38 x 25 x 29 mm). The patient underwent <sup>68</sup>Ga-mDesmo (3.34 mCi) brain PET/CT post 35 minutes

### Applications

- Diagnosis of Cushing's syndrome
- Provide requisite information neurosurgeons for precision surgery to preserve normal functioning pituitary.

### Publication

Shukla J, Walia R, Pandey S, Vatsa R, Rana N, Singh H, Kumar R, Mittal BR Ga-68 mDesmo as a novel PET tracer to delineate corticotropinoma: A Pilot study. J Nucl Med 2021; 62 (supplement 2): 1027.

### Transfer of Technology

The Inventors of technology are planning for 'Transfer of Technology' (ToT) for commercialization and are in process to shortlist the manufacturers in different region of country for commercial use of composition and system within the country as well as globally, as per the following broad terms and conditions:

- The Transfer of Technology will be through a mutually acceptable Agreement document, to be signed by the inventors (i.e. Licensor) and a representative of the company (Licensee) authorized to sign on behalf of the company. Once the Agreement is signed, the inventors will share the relevant information regarding synthesis, characterization etc.
- The Inventors of the technology (Licensor) will grant to the Licensee a limited, non-exclusive, non-transferable, non-sub licensable, revocable license to the Technology, for the purpose of commercialization of the technology as quickly as possible.
- The Licensee is expected to commercialize composition in the market within 1 year of execution of the Agreement (i.e. Transfer of Technology) at a reasonable price. The technology and its components should be as per standard grade, and be compliant with the relevant national standards.
- Failure of adherence to this timeline, and documentation of monthly milestones will be a sufficient reason for unilateral cancellation of the Agreement by the Licensors.
- The Licensee is expected to make an offer (i.e. bid) of a one-time payment of **License fee** to the Licensor, not less than 50 Lakh for mDesmo Cold kit.
- **Royalty @ of 25% of net sale price** is to be paid to the Licensors by the Licensee, after every 6 months, during tenure of the Agreement.
- Licensor will make efforts to support the Licensee during the process towards commercialization by helping licensee in scaling of formulation and product at pilot plant level through emails and in-person visits.

### **Additional information**

Reputed companies, interested in bidding for the Transfer of Technology may seek additional details through any of the following means:

1. Email correspondence with the Inventors (email Id: **manager\_ipr@pu.ac.in**) citing in the Subject line: Transfer of Technology
2. Personal meeting with the Inventors at a mutually convenient date/time confirmed via email.

### **Invitation to Bid**

Reputed companies should submit the following information in response to this invitation:

1. A brief description of the company and products/services of company.

2. Audited balance sheet of three immediate past preceding years', including profit and loss account and annual report.
3. Reference list of similar engineering supplies of fabrication and services during past 2-3 years
4. A notarized affidavit conforming that the company has not been banned or blacklisted at any time for supplies to government agencies.
5. Bid/offer of License Fee and Royalty (minimum expectation already mentioned above).
6. Clear vision and roadmap towards commercialization, with timelines.
7. Scope of shortening the above-mentioned timelines.
8. Anticipated price of the product in the market

**Interested companies are requested to apply with all the required documents through email with subject "Bid for ToT" to [manager\\_ipr@pu.ac.in](mailto:manager_ipr@pu.ac.in) latest by 31<sup>st</sup> October 2023.**



**For further information please contact**

**Manager (IPR)**

**Technology Enabling Centre (TEC) - Panjab University,  
1<sup>st</sup> Floor, Guru Tegh Bahadur BuildingOpp, USOL, Panjab University,  
Chandigarh - 160014, Phone: +91 172 2779426, 2534352  
Mobile: +91 9914343559, Email: [manager\\_ipr@pu.ac.in](mailto:manager_ipr@pu.ac.in)**