



## Guidance document for processing PM-JAY packages

### Pre-operative tumor embolization

#### Procedures covered: 1

#### Specialty: Interventional Neuroradiology

Package name	Procedure name	HBP 1.0 code	HBP 2.0 code	Package price (INR)
Pre-operative tumour embolization (per session)	Pre-operative tumour embolization (per session)	S900014	IN005A	40,000

**ALOS:** 3 Days

**Minimum qualification of the treating doctor:**

**Essential:** DM/Equivalent (in Interventional Neuroradiology); may require a multidisciplinary approach

**Special empanelment criteria/linkage to empanelment module:** Care at Tertiary Hospital with facilities for interventional neuroradiology (trained in neuro-endovascular techniques)

#### Disclaimer:

For monitoring and administering the claim management process of **Pre-operative tumor embolization**, NHA shall be following these guidelines. This document has been prepared for guidance of PROCESSING TEAM and TRANSACTION MANAGEMENT SYSTEM of AB PM-JAY for the claims of procedures mentioned above. The hospitals can also refer to this document so that they have the insight on how the claims will be processed. However, this document doesn't provide any guidance on clinical and therapeutic management of patient. In that respect the hospitals and physicians may refer to any other relevant material as per the extant professional norms.

## **PART I: GUIDELINES FOR CLINICIANS AND HEALTHCARE PROVIDERS**

### **1.1 Objective:**

The purpose of this section is to act as a guidance & a clinical decision support tool for the clinicians in deciding the line of treatment, plan clinical management of patient and decide referral of cases to the appropriate level of care (as required) for treatment of patients under PMJAY and selection of corresponding Health Benefit Package.

It will also serve as a tool for hospitals to determine and submit the mandatory documents required for claiming reimbursement of health benefit package under PMJAY.

### **1.2 Clinical key pointers:**

Tumor embolization refers to any procedure performed either percutaneously, through a direct puncture of the tumor, or via an endovascular approach (most commonly through the femoral artery) in which particles, liquid embolic agents, coils, gelfoam or other materials are injected with the goal of reducing the tumor vascularity.

- Peri-operative embolization of vascular head, neck, and brain tumors is an effective and safe adjuvant to surgical resection.
- Devascularization may help to reduce intra-operative bleeding and operative times and have thus become an integral part of the management of these tumors.
- The goal of tumor embolization is to decrease tumor vascularity either to facilitate surgical excision or for palliation.
- The location, presenting symptoms, patient characteristics, demographics as well as prognosis and outcome vary depending on tumor type, and it is important to clearly delineate the type of tumor for which the embolization procedure is being reported.
- The goal of embolization should be to reduce the amount of tumor blush by approximately 80% or more.

### Indication

- Moderate or highly hypervascular tumour such as Juvenile angiofibroma (JNA), Hemangiopericytoma, Metastatic lesions, Meningiomas etc.

### Timing of surgery relative to embolization

- The radiographic and clinical effects of embolization may be transient or permanent depending on the embolic material used.
- The timing of embolization with respect to surgery is therefore important. Thus, surgical resection should be carried out 1–8 days after embolization in order to maximize the benefits of the embolization procedure.
- However, surgery may sometimes need to be delayed for various reasons.

### Complications

#### Potential complications of head and neck tumor embolization

Minor complications	Major complications
Puncture site complications including hematoma	Cranial nerve palsy
Localized pain	Skin and mucosal tissue necrosis
Fever	Stroke including intracerebral hemorrhage
	Death
	Contrast-induced nephropathy

Duffis EJ, Gandhi CD, Prestigiacomo CJ, et al. Head, neck, and brain tumor embolization guidelines. *J Neurointerv Surg.* 2012;4(4):251-255. Doi:10.1136/neurintsurg-2012-010350

### 1.3 Mandatory documents- For healthcare providers

Following documents should be uploaded by the concerned hospital staff at the time of pre-authorization and claims submission:

Mandatory document	Pre-operative tumor embolization
<b>i. At the time of Pre-authorization</b>	
Clinical notes including evaluation findings, indication for embolization, and planned line of treatment	Yes
CT/MRI Brain / Digital Subtraction Angiography (DSA)	Yes
Complete blood count, Prothrombin Time (PT)/ International Normalized ratio (INR)	Yes
<b>Optional</b>	Yes
Balloon test occlusion (BTO)	
Histopathological Examination report	Yes
<b>ii. At the time of claim submission</b>	
Detailed Indoor case papers (ICPs)	Yes
Detailed Procedure / operative notes	Yes
Intra-procedure photograph stills (optional)	Yes
Intra-procedural MR/CT angiography (optional)	Yes
Clinical Evaluation of the brain function during the procedure (Intra-operative monitoring documentation)	Yes
<b>Intra-operative monitoring (Optional)</b>	Yes
Electroencephalography (EEG)	
Provocative testing (Amytal/WADA)	
Post-procedural DSA	Yes
Embolic agent details (invoice/barcode)	Yes
Detailed discharge summary	Yes

## **PART II: GUIDELINES FOR PROCESSING TEAM**

**2.1 Objective:** To provide guidance to the pre-authorization and claims processing team in ascertaining the medical necessity of procedure carried out vis a vis the patient's medical condition as evidenced by supporting documents/investigation reports etc., in deciding the admissibility and quantum of claim and compliance with mandatory documents by the hospital.

**2.2 Following mandatory documents to be diligently reviewed by the pre-auth / claims processing personnel:**

**2.2.1 At the time of pre-authorization processing- For pre-authorization processing doctor (PPD):**

- a. Clinical notes - detailed history, signs & symptoms, evaluation findings, indication of procedure, and planned lined of treatment?
- b. Did Digital Subtraction Angiography (DSA) confirm diagnosis?
- c. Was histopathological examination report submitted?

**2.2.2 At the time of claim processing- For claims processing doctor (CPD)**

- a. Are the detailed ICPs with daily vitals and treatment details?
- b. Are the detailed procedure / Operative Notes available?
- c. Invoice/barcode of embolic agents used submitted?
- d. Was the imaging indicative of procedure to determine the course of therapy?
- e. Was intra-operative monitoring (neurological assessment) documented and imaging submitted?
- f. Is the Discharge summary with follow-up advise at the time of discharge?

**PART III: GUIDELINES FOR IT**

**3.1 Objective:** To enable setting up of cross check mechanisms / rule engines within the IT platform (TMS) to ensure compliance with STGs and to prevent fraud / abuse of the Health Benefit Package.

**3.2 Below mentioned are the scenarios where a provision would be built in TMS for pop-ups:**

- I. Was the diagnosis and imaging indicative of performing the procedure/surgery? Yes
- II. Is the patient having evidence of? No
  - a. Fever
  - b. Sepsis

Till the time the functionality is being developed, the processing doctors shall check the above manually.

**References**

1. Standard Treatment Guidelines Interventional Radiology. Health & Family Welfare Department. Government of Maharashtra
2. Duffis EJ, Gandhi CD, Prestigiacomo CJ, et al. Head, neck, and brain tumor embolization guidelines. *J Neurointerv Surg*. 2012;4(4):251-255. doi:10.1136/neurintsurg-2012-010350