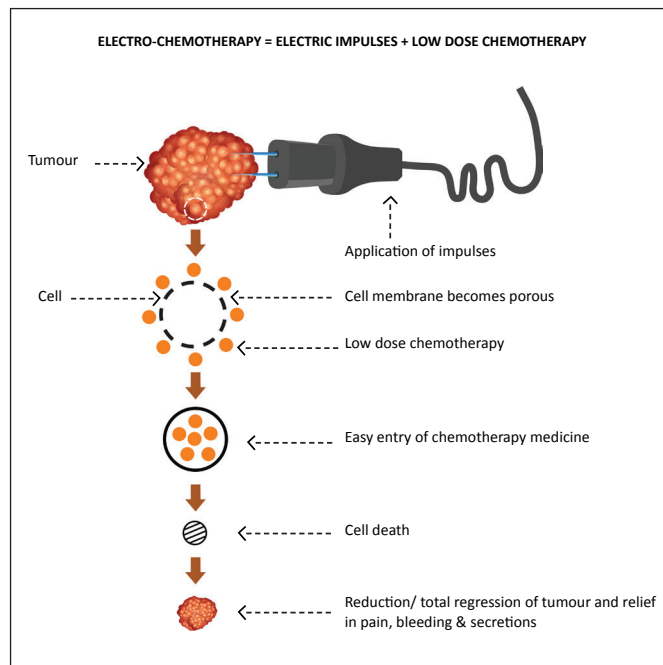


## WHAT IS ELECTRO-CHEMOTHERAPY?

Electro-chemotherapy is a combination of high voltage short duration electric impulses and low dose chemotherapy. Electric impulses change the permeability of cancer cells for a short duration. This results in a dramatic increase in uptake of cancer drugs. Increased uptake enhances impact to deliver good tumour regression.



## WHEN IS ELECTRO-CHEMOTHERAPY RECOMMENDED?

Electro-chemotherapy is recommended as:

**NEO-ADJUVANT TREATMENT:** To reduce tumour size prior to surgery and make surgery of large tumours easier/ feasible.

**ADJUVANT TREATMENT:** Along with chemotherapy and/or radiation for better tumour specific results.

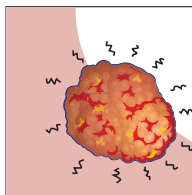
**PALLIATIVE CARE:** For tumour size reduction and control of tumour pain, bleeding and secretions to ease trauma and inconvenience.

**FOR DIFFICULT TUMOURS:** For tumours which fail to respond to routine treatment modalities and for recurring tumours.

## HOW EFFECTIVE IS THE TREATMENT?

Electro-chemotherapy is an effective tool for tumour regression, local pain reduction and management of tumour bleeding and secretions. One can expect partial to total relief in tumour size and symptoms. Appropriate tumour and patient selection is essential to achieve good tumour healing.

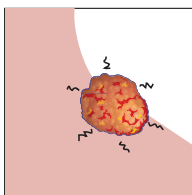
### TUMOUR TO BE TREATED



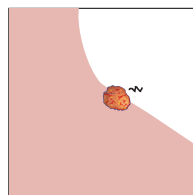
### PERMEOS IMPACT:

- TUMOUR REGRESSION
- PAIN RELIEF
- BLEEDING & SECRETIONS CONTROL

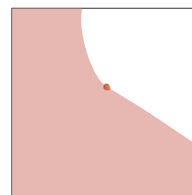
### PARTIAL RELIEF



### CONSIDERABLE RELIEF



### TOTAL RELIEF

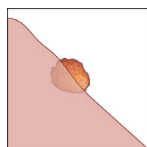


## WHAT TYPES OF TUMOURS ARE TREATED WITH PERMEOS?

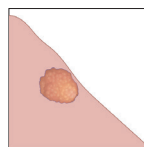
### TYPES OF TUMOURS TREATED BY ELECTRO-CHEMOTHERAPY:

- Head & Neck Squamous Cell Carcinoma
- Malignant Melanoma
- Basal Cell Carcinoma
- Adenocarcinoma of Breast and Salivary Gland
- Hypernephroma
- Kaposi Sarcoma
- Transitional Cell Carcinoma

PERMEOS PFV, the current model of PERMEOS, treats cutaneous and sub-cutaneous tumours.



Cutaneous tumour:  
Tumour on the skin surface.



Sub-cutaneous tumour:  
Tumour near the skin surface.  
(Accessible fully/ partially from the skin surface.)

## HOW MUCH TIME DOES THE THERAPY NEED?

### TIME NEEDED FOR THE PROCEDURE:

Permeos electro-chemotherapy is a short procedure. It usually takes less than 30 minutes. If the procedure is done under local anaesthesia, patient is discharged after an observation period of 2 to 3 hours. In case of a general anaesthesia, procedure and observation period will be longer.

### TIME PERIOD TO SEE THE IMPACT:

First signs of improvement are seen in about 2 days. Early relief is in tumour pain, bleeding and secretions. Tumour regression is evident in 2 to 4 weeks. For bigger tumours it may take up to 10 weeks to see the complete treatment impact.

### TIME SCHEDULE FOR A FOLLOW-UP INSPECTION:

You can go for a follow-up inspection in 3 to 4 weeks after the procedure, unless instructed differently by the doctor. Normally in 3 to 4 weeks, the treatment impact is understood, and future course of action can be determined accordingly.

### REPEATING THE PROCEDURE:

If the tumour size is big, (tumours larger than 1 to 1.5 cm<sup>3</sup>), repeated sessions will be necessary. The doctor will decide about the number and frequency of treatment sessions based on the follow-up inspection.

## DOES THE THERAPY HAVE ANY SIDE-EFFECTS?

### ELECTRO-CHEMOTHERAPY HAS MINOR OR NO SIDE-EFFECTS.

Quantity of chemotherapy drug required in electro-chemotherapy is fairly small. Hence medicine side-effects are minor or nil. The electric impulses cause no or little side-effects.

A few probable side-effects include fever due to intravenous injection of Bleomycin and small local pain and redness. These can be treated with routine treatment measures. Doctor may prescribe antibiotics to avoid post-procedural infection. In case of general anaesthesia, any vomiting or nausea in sensitive patients can be managed with standard regimens for the problem.

# PERMEOS

## ELECTRO-CHEMOTHERAPY

### EFFECTIVE TUMOUR MANAGEMENT

- TUMOUR REGRESSION
- PAIN REDUCTION
- BLEEDING & SECRETIONS CONTROL
- MINOR OR NO SIDE-EFFECTS



### DEVICE HIGHLIGHTS

- Globally proven technology.
- Safety and efficacy tested from government approved facilities:
  - IIT Bombay
  - National Toxicology Centre, Pune,
  - National Electrical & Electronics Laboratory (West) Pune.
- In-built image storage for future reference.
- System generated printed report.

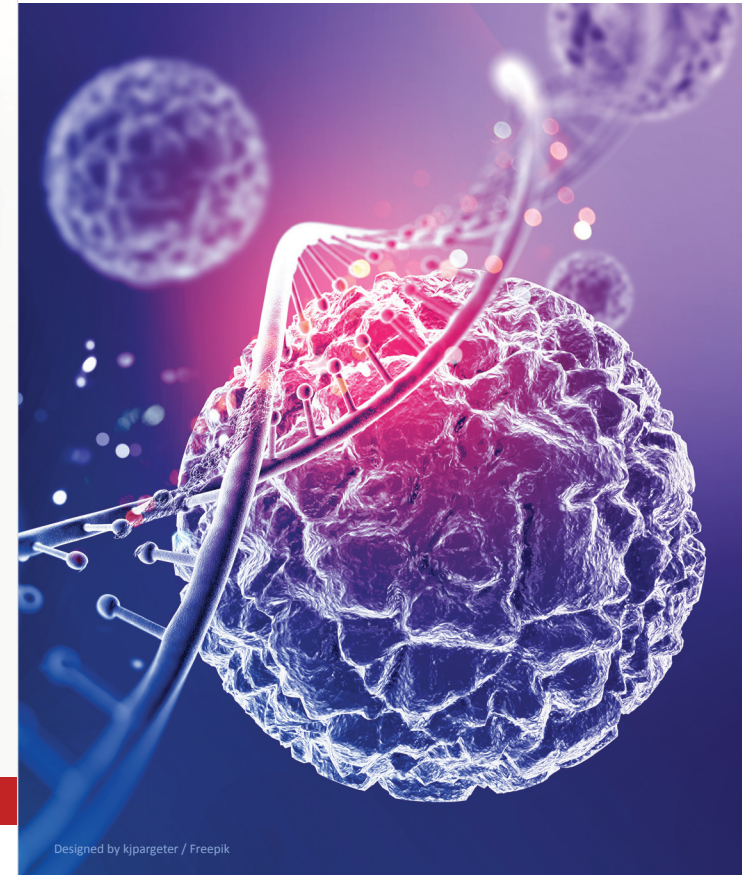
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**PERMEOS**  
effective tumour management  
ELECTRO-CHEMOTHERAPY



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## ADVANCED TREATMENT FOR CANCER TUMOURS

PATIENT INFORMATION BROCHURE