

## REFERENCES AND/OR ACKNOWLEDGEMENTS

Conflict of interest No conflict of interest

6ER-017

### PREVENTION OF EXTRAVASATION BY THE LOCAL APPLICATION OF HYBRID AEROGEL MICROPARTICLES AS DRUG DELIVERY SYSTEMS FOR CERVICAL CANCER CHEMOTHERAPY

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10.1136/ejhp-2022-eahp.362

**Background and importance** One of the most common cancers unique to women is cervical carcinoma which is caused by the human papillomavirus. Cisplatin is primarily indicated in the chemotherapeutic treatment of this cancer type, administered intravenously either as monotherapy or in combination with other antineoplastic agents. Due to lack of target tissue specificity and high drug toxicity, there are several side effects to the application of the drug. Furthermore, being given intravenously, several cases of extravasation have been reported, causing mild to severe degree of tissue damage. Silica-gelatin hybrid aerogels have been shown to be biodegradable and biocompatible with tissue cells and are promising platforms for local and non-invasive drug delivery.

**Aim and objectives** Our aim is to improve the chemotherapeutic approach by developing a model that locally delivers cisplatin to the cervix by using mucoadhesive aerogel microparticles which are further incorporated into suppositories and inserted intravaginally for subsequent release of cisplatin in a modified, controlled-release manner, thereby reducing toxic doses and extravasation caused by IV administration.

**Material and methods** The drug carrier vehicle was developed using the sol-gel method, including functionalisation with cisplatin and supercritical drying. In vitro cytotoxicity studies were carried out against HeLa cells and analysed via MTT assay.

**Results** The resulting vehicles are mesoporous containing 10–15 mg/g cisplatin in coordination bonds. The drug is predicted to be released on a pH responsive profile. Pristine particles showed 100% cell viability while cytotoxicity results showed that 1 mg/mL of the functionalised vehicle had the same antiproliferative effect as 0.5 µg/mL free cisplatin.

**Conclusion and relevance** The aerogel microparticles are biocompatible with tissue models and appear safe for administration. Drug loading into these particles is expected to reduce the dosing of free cisplatin, hence reducing toxicity as well as being cost-beneficial. Extravasation could be prevented by this therapeutic approach and patients could self-administer them when formulated in suppositories, thereby reducing the number of inpatients in hospitals.

## REFERENCES AND/OR ACKNOWLEDGEMENTS

Conflict of interest No conflict of interest

6ER-018

### USE OF ELTROMBOPAG IN ROUTINE CLINICAL PRACTICE

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10.1136/ejhp-2022-eahp.363

**Background and importance** To investigate the use of eltrombopag in our centre and its suitability in routine clinical practice.

**Aim and objectives** To evaluate the use of eltrombopag in routine clinical practice and its compliance with the Summary of Product Characteristics (SmPC).

To measure the efficacy according to platelet count response and the need for other concomitant treatments.

**Material and methods** Observational, retrospective and descriptive study of adult patients who received treatment with eltrombopag from June 2020 to October 2021.

The following variables were collected from the electronic medical record: demographic data, indication for use, initial dose, platelet count and concomitant treatments related to hemostasis.

Efficacy was established according to platelet counts at 3 and 3 months after initiation of treatment, aiming for values between 50 000 and 150 000 platelets/µL.

**Results** Thirty-five patients (54% women), median age 68 (26–95) years, were included in the study. It was used on-label in 77% (27) of patients: primary immune thrombocytopenia (n=26) and severe aplastic anaemia (n=1). The uses off-label were: recovery of normal platelet counts in patients with oncohaematological diseases 11% (4), patients with hereditary bleeding disorders 6% (2) and due to secondary thrombopenias 6% (2).

60% (21) patients started with doses of 50 mg per day as indicated by the SmPC, 29% (10) started with a 25 mg daily regimen, 9% (3) with a dosage of less than 25 mg per day and 1 patient with 75 mg per day.

The mean platelet count at the start of treatment was 41 710 platelets/µL. Three months afterwards it was 113 910 platelets/µL; 10 patients had values above 150 000 platelets/µL, 6 had values below 50 000 platelets/µL and 6 discontinued treatment. After 6 months the mean was 97 090 platelets/µL; 7 had values higher than 150 000 platelets/µL, 6 had values lower than 50 000 platelets/µL; 3 patients who had discontinued eltrombopag restarted it and two more discontinued it.

In 54% (19) of the patients, eltrombopag was started after cycles of corticosteroids, which were progressively withdrawn. 20% (11) required other adjuvant treatment after starting eltrombopag: prednisone (6), immunoglobulins (2), cyclosporine (2) or rituximab (1).

**Conclusion and relevance** Eltrombopag was used on-label in most patients and a high percentage started with the recommended dose according to the SmPC.

The evolution of the platelet count shows the efficacy of eltrombopag, with a minority of patients having platelet counts below 50 000 platelets/µL and only 11 patients requiring adjuvant treatment.

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