

SUCCESSFUL DESENSITISATION IN A PATIENT WITH DASATINIB HYPERSENSITIVITY

A. RODRÍGUEZ ESQUIROZ, J. POLO GARCÍA, L. ULACIA EPELDE, B. LARRAYOZ SOLA, D. TEJADA MARÍN, P. ALDAVE COBOS, R. DE LA RIVA BOHIGAS, G. PINILLA LEBRERO, I. ORTEGA BELÍO, M. SAROBE CARRICAS, J.J. ELIZONDO ARMENDÁRIZ

COMPLEJO HOSPITALARIO DE NAVARRA, PHARMACY, PAMPLONA, SPAIN.

BACKGROUND

- A 65-year-old woman with **Philadelphia Chromosome positive acute lymphoblastic leukemia** was treated with dasatinib 140 mg daily.
- After the first dose, the patient experienced anaphylactic shock presenting poor general condition, nausea, rash, diarrhea, severe hypotension, anuria and angioedema.
- Dasatinib treatment was discontinued and corticosteroid and fluid therapy were initiated.
- It was considered essential to start a **dasatinib desensitization protocol** immediately.

OBJECTIVES

To report a successful oral desensitization protocol for dasatinib.

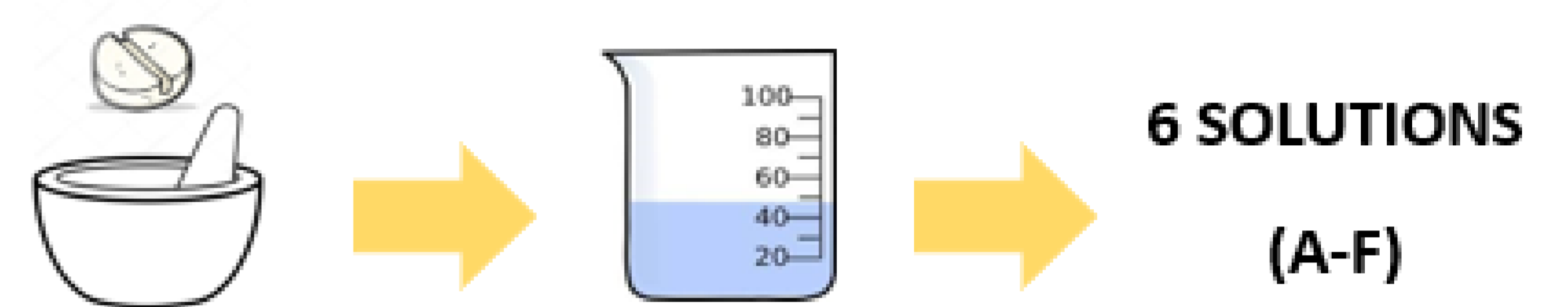
RESULTS

- When the patient took the dose of 90 mg, she started with pruritic malar edema, neck erythema and abdominal hives.
- She was administered antihistamines and corticosteroids.
- The protocol was restarted after 48h at the 70 mg dose, with premedication. Some hours later, the patient experienced rash in the upper left limb and facial edema.
- The next day the scheme was began at 40 mg. It was followed with 70 mg, 90mg (divided in two daily doses of 70 mg and 20 mg), 110 mg (divided in 70 mg and 40 mg) and reached 140 mg (70 mg twice a day). **It has been well tolerated for 7 weeks.**

MATERIALS AND METHODS

The available literature was reviewed and the following oral desensitization protocol was designed to reach the therapeutic daily dose of 140 mg.

DAY 1



It was administered 9 increasing dasatinib doses at **30 minutes intervals**:

| Nº DOSE | SOLUTION | VOLUME | DOSE |
|---------|---------------|--------|--------|
| 1 | A (20 ng/ml) | 1 ml | 20 ng |
| 2 | B (200 ng/ml) | 1 ml | 200 ng |
| 3 | C (2 µg/ml) | 1 ml | 2 µg |
| 4 | D (20 µg/ml) | 1 ml | 20 µg |
| 5 | E (200 µg/ml) | 1 ml | 200 µg |
| 6 | F (2 mg/ml) | 1 ml | 2 mg |
| 7 | F (2 mg/ml) | 2 ml | 4 mg |
| 8 | F (2 mg/ml) | 3 ml | 6 mg |
| 9 | F (2 mg/ml) | 4 ml | 8 mg |

| DAY | DOSE |
|-----|--------|
| 2 | 20 mg |
| 3 | 40 mg |
| 4 | 70 mg |
| 5 | 90 mg |
| 6 | 110 mg |
| 7 | 140 mg |

Next days from tablets:

CONCLUSION

- This is a **successful report of a dasatinib desensitisation protocol**.
- The use of a **desensitisation protocol enables patients with hypersensitivity reactions to the drug to be treated safely with the most convenient therapy**.

REFERENCES

Karaatmaca B, Aytac S, Sahiner UM, Sekerel BE, Soyer O. Successful oral desensitization with dasatinib in delayed cutaneous hypersensitivity reactions. Ann Allergy, Asthma Immunol.2019;1-2.

