

## Oral Communication Abstract

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### **Tolvaptan resistance predicts short-term poor prognosis in oncologic patients with the syndrome of inappropriate anti-diuresis**

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**Objectives:** Tolvaptan (TVP), a vasopressin receptor antagonist, represents a therapeutic option in the syndrome of inappropriate anti-diuresis (SIAD), inducing a net increase in free water excretion. This study aimed to evaluate the effect of TVP on hyponatremia in oncologic patients. We assessed the incidence of re-hospitalization due to hyponatremia.

**Methods:** 15 oncologic patients who developed SIAD were enrolled. Patients receiving TVP belonged to group A, whereas hyponatremic patients treated by hypertonic saline solutions and fluid restriction formed Group B.

**Results:** Sodium level at admission was  $120.4 \pm 2.9$  mmol/l. Group A achieved the correction of serum sodium, defined at 135 mmol/l, after  $3.7 \pm 2.8$  days. In group B, patients had a similar trend for sodium increase ( $\Delta Na: 7.4 \pm 4.2$  mmol/l/24h), but the target levels were obtained more slowly, after  $5.2 \pm 3.1$  days ( $p: 0.01$ ), than group A. The hospital stay was longer in group B than TVP patients ( $17.6 \pm 4.7$  vs  $11.2 \pm 3.4$  days;  $p < 0.01$ ). Group B had a higher incidence of re-hospitalization than group A. In group A, 37% of patients had hyponatremic relapses, notwithstanding the progressive increase of doses from 7.5 until 60 mg per day of TVP, revealing a complete lack of response to TVP. These patients revealed growth of tumor mass or new metastatic lesions.

**Conclusions:** TVP improved hyponatremia more efficiently and stably than hypertonic solutions and fluid restrictions, with a high rate of chemotherapeutical cycles concluded. Positive consequences were obtained about the hospital stay, relapse rate of hyponatremia, and re-hospitalization.

Figure 1

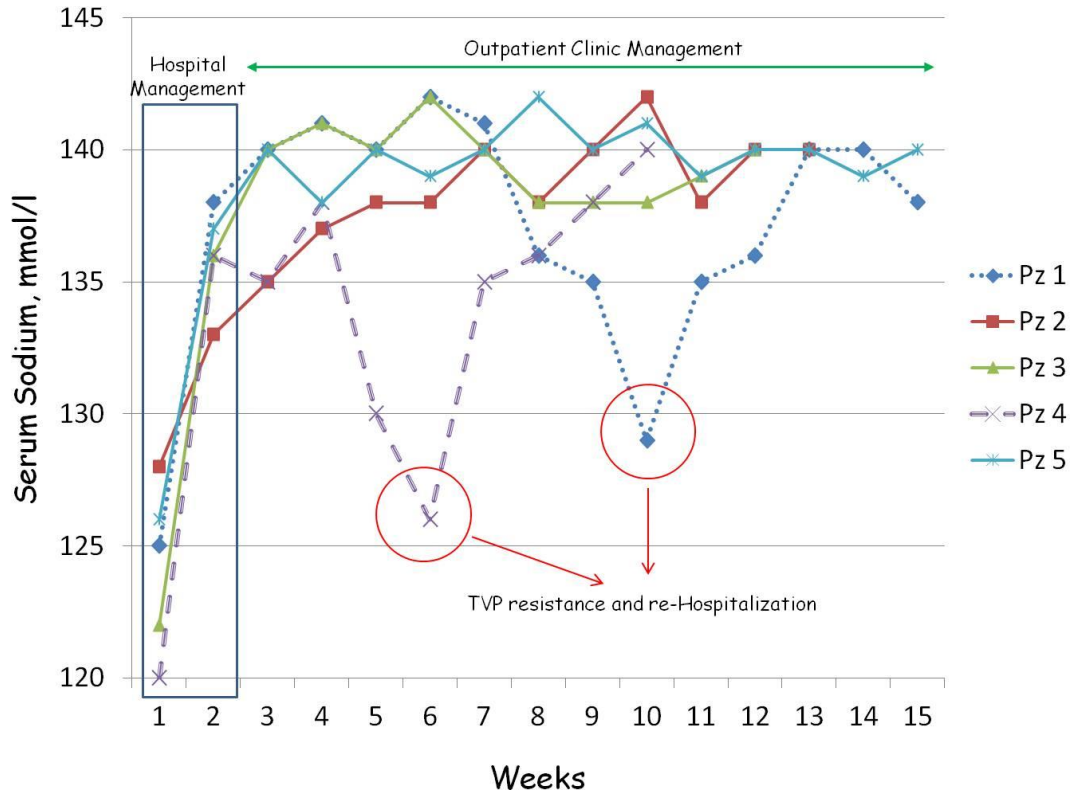


Figure 2

