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**Humoral Hypercalcaemia of Malignancy in Newly Diagnosed
Gastric Cancer**

DISCLOSURE OF INTEREST

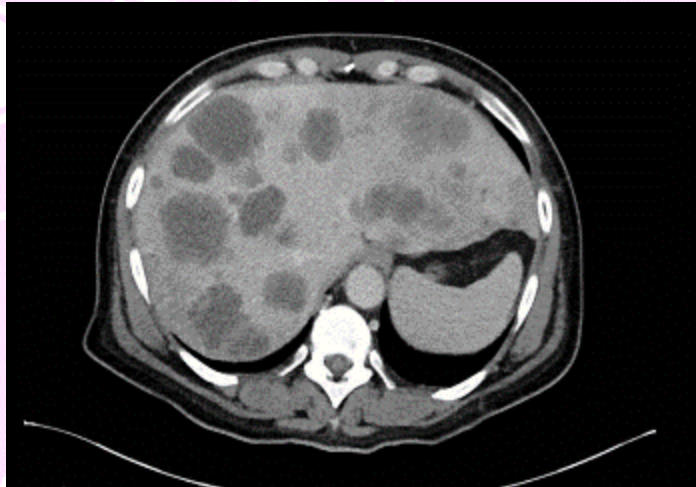
- ◉ **Consultancy fees/Honoraria:** Tesaro
- ◉ **Travelling/Accommodation/Expenses:** Tesaro, GlaxoSmithKline
- ◉ **Funding:** Cancer Research UK (CRUK) Clinical Training Fellowship Fund

Background

- ❑ 53-year old Caucasian lady presented to GP with early satiety and 5kg weight loss over a few months. No changes in bowel habits.
- ❑ **Past Medical History:** Hypothyroidism, Anxiety, Superficial Scalp Melanoma 2010 (excised)
- ❑ **Drug History:** Citalopram, Levothyroxine. No known allergies
- ❑ **Social History:** Never smoker, occasional alcohol. Childminder to two teenage children.
- ❑ **Family History:** Nil
- ❑ On examination, mild jaundice and evidence of hepatomegaly. No abnormal breast lesions.

Investigations

- ⦿ **Bloods:** Na 139, K 4.2, Cr 92, Bilirubin 30 (3-17), ALT 120 (7-56), ALP 200 (2-140), Corrected Calcium 2.45 (2.20-2.60).
- ⦿ **Tumour Markers:** CEA, CA-125, S-100, CA-199, AFP within normal range.
- ⦿ Ultrasound suggestive of bilobar metastases



Multiple liver metastases
but primary not identified.

Recommended liver biopsy
and tumour markers.

Further Investigations

- **Liver biopsy**: Poorly differentiated adenocarcinoma, CK7+, CK20+, CDX-2 positive
- **Endoscopy (OGD)**: Mass in gastric antrum. Biopsy suggestive of adenocarcinoma, HER2 status pending.
- Patient promptly recalled to clinic to commence chemotherapy:
 - Attended in wheelchair, slurred speech.
 - Performance Status 4
 - Obtunded, GCS 10/15
 - CT head: No evidence of brain metastases
- Admitted to ward, palliative care called. Laboratory contacted ward doctors: **Corrected Calcium 4.89** (2.20-2.60)

Inpatient Management

- Bisphosphonates (zometa 4mg), intravenous hydration of 6L daily, repeat staging CT after hydration. **PTH 9.8** (1.6-6.9). No evidence of parathyroid adenoma on neck scan. HER2 returned negative.



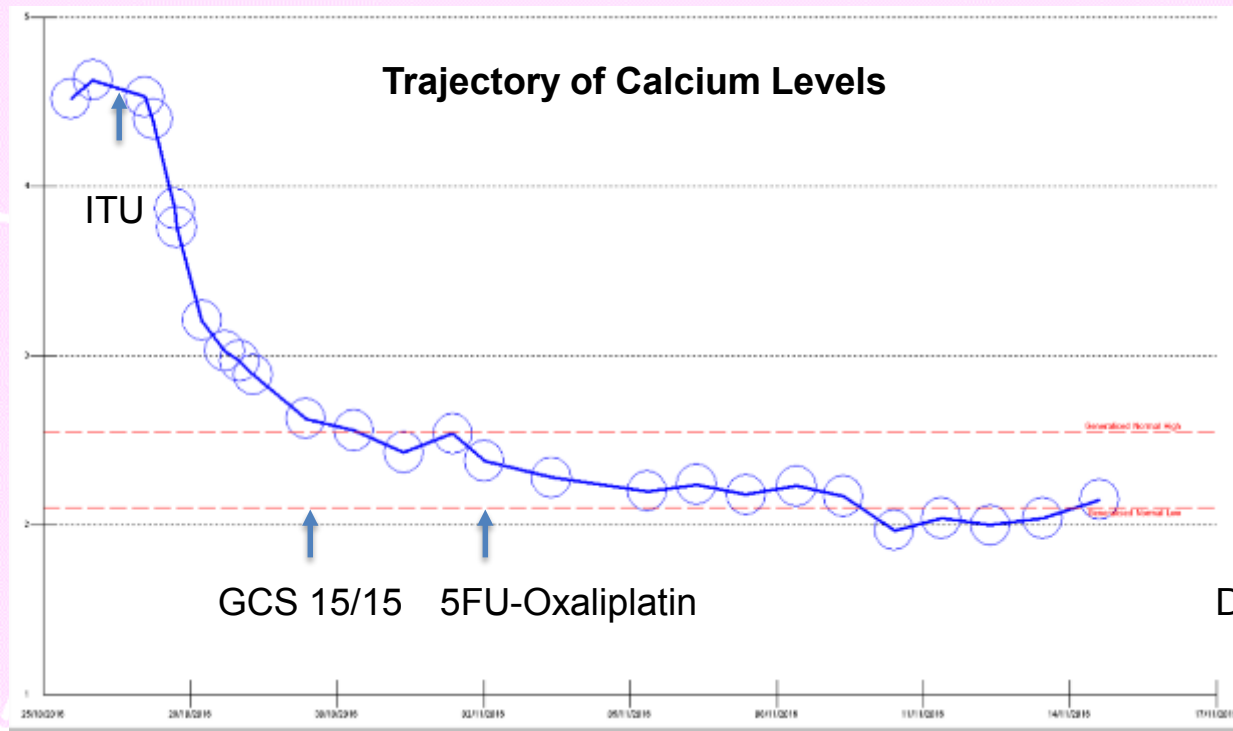
Initial CT scan



3 weeks later

- Calcium not responsive to rehydration and bisphosphonates. Discussion between nephrology, intensive care and oncologists: **for filtration in intensive care**

Conclusion and Discussion Points



Discussion Points:

- ❑ How common is HHM in gastric adenocarcinoma? (*Kumar et al, Journal of Gastric Cancer 2016*)
- ❑ PTHrP not routinely measured in UK labs. Is it appropriate to measure in this case?
- ❑ Would her management have changed in the era of immunotherapy?

