INTRODUCTION
Wilms' tumour (WT) is the most common renal cancer in children with a 5-year overall survival of > 90% after combined modality treatment. Metastatic disease, anaplastic subtype and adult age are considered to be poor prognostic factors. The outcome of WT has improved remarkably over the last decades primarily due to the availability of better chemotherapeutic agents and effective radiation techniques. While the prognosis is better for children diagnosed with WT, it's not so in adolescents and has poor outcome as compared with children. We report the case of an adolescent girl diagnosed to have metastatic WT which was resistant to standard chemotherapeutic protocols and responded partially to Bevacizumab.

CASE REPORT
A 15 years old Omani girl was diagnosed to have stage-IV diffuse anaplastic WT with multiple pulmonary metastasis. Following a right nephrectomy, the patient was treated with chemotherapy according to Wilms Tumour Study Group (NWTSG5) protocol, followed by radiotherapy to the residual metastatic lymph nodes at the right para-aortic/retrocaval region. This was followed by further chemotherapy according to the protocol. Following completion of chemotherapy, a PET/CT scan showed residual disease in the region of right retrocrural lymph nodes and pulmonary metastasis. The residual lymph nodes were treated with the radiation. A follow-up PET-CT, 6 months later, showed progressive disease in both lungs. Metastasectomy was performed on the left side and two cycles of ICE (Ifosfamide, Carboplatin and Etoposide) were administered. Post-therapy, the CT scan showed a huge mediastinal mass abutting, two small right lung nodules (0.2 cm and 0.4 cm in size), and new multiple lesions in the liver and spleen. PET-CT scan confirmed the presence of these lesions with high FDG activity and SUV.

In view of paucity of data on the treatment of adult WT for patients who had failed two lines of chemotherapy, the patient was treated with a combination of Bevacizumab, Oxaliplatin and liposomal Doxorubicin every two weeks. A CT scan following 4 cycles showed a very good partial response. Chemotherapy was continued to a total of 12 cycles over the course of 6 months. Total resolution of disease was seen in the liver and spleen with a marked reduction in the size of disease of the mediastinal mass (Figure 2).

The patient was referred for high dose chemotherapy and autologous stem cell therapy (ASCT) to consolidate the response achieved with chemotherapy. However, there was difficulty in mobilizing stem cells, and the patient refused harvesting the stem cells from the bone marrow.

ABSTRACT
Wilms' tumour is common among children but rare in adults. Children with Wilms' tumour have better prognosis even when diagnosed at advanced stage. We report the case of an adolescent girl with chemo-resistant metastatic Wilms' tumour treated previously with two lines of chemotherapy. Upon progression on second line chemotherapy, there was a partial response to Bevacizumab based combination chemotherapy in the third line. Patient was referred for high dose chemotherapy and autologous stem cell therapy. The latter could not be achieved. The patient had a relapse 3 months later and succumbed to the disease.

Key Words: Wilms' tumour, Bevacizumab, Adolescent, Partial response.

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Anti-VEGF antibody, Bevacizumab has been shown to produce objective responses in children with resistant, refractory, heavily pretreated solid tumours including WT. In a report by Benesch et al., 15 patients were treated with Bevacizumab, who had experienced progressive disease on previous chemotherapy regimens and 2 of those patients had stage-IV WT. Both patients showed stable disease for 6 - 7 months and followed by progressive disease.6

To authors' knowledge, this is the first report of the use of Bevacizumab in an adolescent with WT, who had a sustained very good partial response lasting almost 3 months following the cessation of combination chemotherapy. This combination can be considered in the management of such disease.

REFERENCES

DISCUSSION
With combination chemotherapy, the outcome of WT has improved remarkably in children, but for adults it remains poor.2,5 In a database reported by the EUROCARE, only 0.19% of patients had adult WT with an overall survival (OS) of 69.9% at 1 year and 47.3% at 5 years which is much less than that reported for children. Adults experienced a higher treatment related morbidity and mortality as well.2 There are various reasons for the poor prognosis associated with adults diagnosed to have WT, including advanced stage at diagnosis, and poor tolerance to chemotherapy.5

WT has been shown to overexpress vascular endothelial growth factor receptor VEGF-r, especially the subtype VEGF-C in experimental and small clinical studies and has been found to be associated with poor prognosis.6-8 In a small study by Nowicki et al., 7 of 25 WT patients expressed VEGF-C which was an unfavourable prognostic factor and authors concluded that targeted therapy against VEGF may have a role in the treatment of WT.7

marrow. The disease relapsed 3 months later, and the patient succumbed to the disease.