Pazopanib for Treating Metastatic Renal Cell Carcinoma in Egyptian Patients

Technology Appraisal

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3. The statement regarding conflict of interest

The authors report no conflicts of interest. The authors alone are responsible for the content and writing of this article.

4. A statement on whether the report has been externally reviewed

Each technology appraisal report is evaluated by the PE Committee, which is one of CAPA's standing advisory committees and consist of members who represent different specialties such as statistics, clinical evidence, economics, medicine, clinical pharmacy and pharmacoeconomics.

5. The short summary that can be understood by the non-technical reader

This model addresses both the health and economic implications of both drugs. This study helps inform the health care decisions in allocation of health care system resources and achieving better health for the Egyptian population. However, we are in a great need for local trials to build our local data. More accurate localized data will help in reaching health care decisions with the best available evidence for our population.

We can conclude that pazopanib compared with sunitinib for the treatment of renal cell carcinoma is cost saving from the Egyptian Health insurance perspective, while it is not cost effective from PTES perspective due to the elevated pazopanib price offered to PTES program.

6. Reference made to the policy question addressed

في ضوء الاجتماع لمناقشة القرار النهائي للدراسة والاستماع لتعقيبات كلا الشركتين بحضور ممثليها أمام أعضاء اللجنة بالاضافة لاثنين من الدكاترة المتخصصين في مجال علاج الأورام، فقد اتفق الحضور علي القرار الأتي:

في ضوء ما تبين من الدراسة التي قامت بها وحدة اقتصاديات الدواء، وجد ان مستحضر **(pazopanib)** هو الأكفأ من حيث الفعالية مقابل التكلفة فهو يوفر 717,474 جنيه على فترة زمنية خمس سنوات وكذلك الأعلي في زيادة "QALY" Quality Adjusted life year بفارق ٠,٤٣ عن مستحضر **(Sunitinib)** .
مع مراعاة ان هناك اسعار مختلفة لمستحضر **Pazopanib** في كلا من التأمين الصحي والعلاج علي نفقة الدولة ولذا يلزم إجراء سناريوهان لبيان تأثير كلا السعرين علي النتيجة النهائية للدراسة. ومع تطبيق السيناريو الثانى فقد تبين ان مستحضر Pazopanib ليس الاكفأ فى الفعالية مقابل التكلفة من منظور العلاج على نفقة الدولة وذلك لتباين سعره عن السعر المقدم للتامين الصحى ICER =279,447 فهو الأعلي في زيادة التكلفة بفارق ١٢٢،٤٧٥ جنيه عن مستحضر **(Sunitinib)** .

وقد ارتأت اللجنة ما يلي:

- يعتبر Pazopanib is non inferior to Sunitinib حيث ان progression free survival هو ٩,٥ عن مستحضر **(Sunitinib)** و ٨,٤ لمستحضر **(pazopanib)** **فى** Comparz trial ويتم استخدامهم كخط علاجى اول في علاج مرضي Metastatic Renal Cell Carcinoma
- يتم السماح باستخدام عقار **(Sunitinib)** كخط علاجي أول في حالات تخطي مستوي الانزيمات الكبدية الحد الأقصي بضعفين الحد الطبيعي (2 Times Upper Normal) ، وكذلك في حالات مرضي الفيروس الكبدي سي وبي والذين شخصت إصابتهم بواسطة PCR.
- وبالنسبة لحالات مرضي Hypertension و Hypothyroidism فيعتبر استخدام عقار Votrient **(pazopanib)** هو الأمثل.

- تقوم وحدة اقتصاديات الدواء بدراسة الجدوي الاقتصادية وفقا لما يلزم من مستجدات.

7. The scope of the assessment specified

- **Objective:**

The objective of this study was to evaluate the cost-effectiveness of Pazopanib versus Sunitinib in Renal Cell Carcinoma patients from the MOH perspective over a time horizon of 5 years.

8. Reference made to the research question(s) that is/are addressed

The main objective of this study was to evaluate the cost-effectiveness of Pazopanib versus Sunitinib in patients with advanced (locally advanced and/or metastatic) renal cell carcinoma who have not previously been treated (first line) from the MOH perspective over a time horizon of 5 years. Our results demonstrate that pazopanib was more effective (more QALYs) and less costly than sunitinib, thus it is cost saving while from another scenario (changing the votrient price) it is not cost-effective.

9. A description of the health technology that has been assessed

The HAS Committee concludes the following:
Pazopanib does not provide an improvement in actual benefit (IAB V, non-existent) in the first-line treatment of advanced renal cell carcinoma. Taking account of the level of evidence for the efficacy of VOTRIENT in the first-line treatment of metastatic renal cell carcinoma, the Committee considers that its actual benefit is low.

NICE concludes the following:
Pazopanib is recommended as a first-line treatment option for people with advanced renal cell carcinoma who have not received prior cytokine therapy and have an ECOG performance status of 0 or 1 and if the manufacturer provides pazopanib with a 12.5% discount on the list price as agreed in the patient access scheme.

British Columbia Cancer Agency in Canada concludes the following:

The **Provincial Systemic Therapy Program** has approved **pazopanib** as first-line agent for palliative therapy of renal cell carcinoma (RCC) with a clear cell component **(UGUPAZO)**. Pazopanib will serve as an alternative to SUNItinib, the reference standard, in patients not previously treated with systemic therapy and in those refractory to cytokine therapy (i.e. interferon-alpha).

10. Sources of information have been used

Direct medical costs including costs of treatment, hospitalization and side effects management according to the Egyptian current practice obtained from MoH tender lists. The quality adjusted life years (QALYs) measured were derived from PISCES study for pazopanib and sunitinib. It should be noted that the beneficial effect of pazopanib on utilities based on this approach are consistent with the other results of PISCES with respect to patient performances and results of COMPARZ. Progression free survival and overall survival data derived from a head to head randomized controlled trial on 1110 patients comparing pazopanib to sunitinib in metastatic Renal Cell Carcinoma.

11. The findings of the assessment discussed (Including the interpretation of selected data and information).

One of the strengths of our model is the use of progression free survival and overall survival data from a randomized controlled head to head trial comparing pazopanib to sunitinib in metastatic Renal Cell Carcinoma. Second, incorporating quality of life issues may be important in clinical decisions. A third strength was the use of micro-costing approach in our model, as it allows for more accurate results.

There are some limitations that need to be considered when assessing the study's relative generalizability. First, lack of meta-analyses and systematic reviews led us to depend greatly on the COMPARZ trial. Second, our analysis did not include the scenario of dose reduction in case of presence of adverse events and its consequences as the insurer does not pay for the consumed doses of drug but paying the whole dosing regimen. In addition, the indirect costs were not included due to unavailability of data.

A limitation of measuring utility from PISCES study for pazopanib and sunitinib is that the number of subjects who completed the EQ-5D assessment at week 10 of the second treatment period was relatively small compared to the randomized population. Among patients randomized to sunitinib then pazopanib, only 52 of 82 patients (63%) completed EQ-5D assessment at week 10 of the second treatment period. In the pazopanib- sunitinib group, only 47 of 86 randomized patients (55%) completed EQ-5D assessment at week 10 of the second treatment period.

If there were time-dependent factors causally associated with treatment group, HRQol, and failure to complete EQ-5D assessment, then this may have biased the comparison of the two groups. Correction for any such bias would require use of methods such as inverse probability weighting. However, we know of no reason to believe that any such confounding would bias the results in favor of pazopanib.

12. The conclusions from the assessment compiled with the conclusions international studies:

It is important to address both the clinical and the economic implications of a new therapy from the payer perspective before deciding on reimbursement of new therapies. Taking the above-mentioned limitations and uncertainties in consideration, the conclusion is that pazopanib compared with sunitinib for the treatment of renal cell carcinoma is cost saving, from the Egyptian insurer perspective (PTES), while it is not cost effective from PTES perspective due to the elevated pazopanib price offered to PTES program.

On the basis of the available evidence, our results are likely to be consistent with other countries like the United Kingdom. Their appraisal committee concluded that pazopanib is recommended as a first-line treatment option for patients with advanced renal cell carcinoma **in certain cases.**