Cancer drugs in Europe: A comparison of HTA processes and decisions for new and UK innovation oncology therapies in France, Germany and the UK – An Analysis using the Prismaccess database

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Methods:

- This comparative analysis includes all pharmaceuticals with an marketing authorization which either applied for initial admission to reimbursement in France, that (launching) Germany and (assessment for reimbursement in Germany.
- For the analysis only those have been included for which full assessments have been published between January 2011 and December 2015.
- Any referrals, i.e. that no decision has been reached after the HTA decision, have been included to national agencies for consideration and, if approved, a decision has been made.
- The cut-off date has been fixed at December 31 2015 in order to have full year timelines.
- The analysis therefore be updated early 2017 with the most recent decisions.
- The PRISMAccess database was searched systematically to identify approved oncology therapies and collect the specific data (criteria and variables).

Results:

- Since 2011, EMA issued positive opinions for 44 New Medical Entities (NMEs), further 6 submissions proceeded with negative opinions (a.o. 2 manufacturers withdrew applications after the CHMP opinion and 4 products received negative CHMP opinions and a negative EC commission decision).
- In France, the reimbursement from the SE in 14 cases was granted to 47 applications, one application withdrew application after the CHMP that issued a conditional marketing authorization (i.e. after a decision based on phase II trial results: the confirmative phase III trial was needed).
- All HTA decision patterns differed according to different primary endpoints of the pivotal trial.
- Overall survival:
  - In the United Kingdom, the degree recommendations accounted for an positive decisions was generally lower with NICE, 19 (68%) and SMR, 14 (53%); positive outcomes only in Scotland, for drug approval, refusals and withdrawals of new medicinal products. For SMC 14 (53%) and 5 (24%)
  - If progression free survival is the criteria to review the decision results:
  - G-BA assigned a conditional added benefit; 6 drugs a minor added benefit and for 1 drug no added benefit was proven.
  - For NICE, 7 drugs a major benefit; further 2 drugs, demonstrating a modest but statistically significant overall survival gain, were not recommended.
  - SMC recommended 5 drugs, but 9 drugs showing a reduction of the mortality rate were not recommended.

Conclusions:

- The use of the Prismaccess database facilitated the analysis of HTA outcomes and revealed certain differences among three countries about the how HTA values are assigned.
- MArS processes revealed a relatively high and similar requirement for a positive HTA decision (49% for OS vs 43% for PFS, whereas for the primary endpoint did not differ). The reversal decision patterns observed for the United Kingdom having the PFS endpoint, whereas Germany processes revealed the tendency of follow-up studies in the HTA decision (49% for OS vs 43% for PFS).
- In France, further studies on the HTA process for new cancer medicines reaching the market (2011-2015) are needed to identify the reasons for these differences and to improve the HTA outcome in these countries.

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<th>Table 1: Selection of key variables for research, data extraction and key analysis interest</th>
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<td><strong>Outcome metrics</strong>: In all three countries are different. In order to use a comparable decision measure in the three countries of interest a quantifiable metric is needed.</td>
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<td><strong>Patient population</strong>: In France, Germany and the UK, the degree recommendations accounted for an positive decisions was generally lower with NICE, 19 (68%) and SMR, 14 (53%); positive outcomes only in Scotland, for drug approval, refusals and withdrawals of new medicinal products. For SMC 14 (53%) and 5 (24%).</td>
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<td><strong>Pharmaceuticals</strong></td>
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<td><strong>Table 2: Heterogeneous outcome metrics – terminological meta-data</strong></td>
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<td><strong>Table 3: HTA Decision time patterns for all 47 anticancer medicines approved by the European Commission and assessed in Germany, France and the UK</strong></td>
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<td><strong>Table 4: Overview of DNA applications and successively accepted HTA assessments</strong></td>
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References:

The References can be provided on demand.

The Author(s) declare no competing interest.

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Author(s) Disclosures:

- The authors declare that all corresponding authors (Droeschel) have no conflicts of interest.
- The authors declare that the corresponding author is the guarantor of the study.