Life-Years Gained with Conditional Reimbursement Access to Innovative Oncological and Hematological Medicines in Finland

HPR50

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OBJECTIVE

Finland is a Nordic welfare state with a population of 5.5 million inhabitants. Finland has an application-based and publicly listed tariff-based reimbursement system for outpatient drugs. Introduced in 2017, the Conditional Reimbursement System (CRS) enables confidential risk-sharing agreements with the Finnish Pharmaceuticals Pricing Board (PPB). Thus far, more than 50 medications have been reimbursed through the CRS.

We have previously demonstrated that the CRS has dramatically improved reimbursement access in hematology and oncology (see Podium P2, 5/16/2022).

Here, we assessed whether faster access to medications with CRS has led to improved life expectancy of patients with cancer.

METHODS

The modelled evaluation applied the PICOSTEPS assessment framework to examine the impact that faster access to medications with CRS may have had on the life-expectancy of cancer patients.

Data was obtained from PPB (reimbursement decisions, n=209), the Social Insurance Institution (SII; quarterly drug purchases and paid reimbursements), and public NICE committee papers (average life-years accrued with the examined treatments in each condition).

Intervention decision time with CRS from 2018 onwards (PPB) was compared to two historical reimbursement decision control periods: 2012-16 (time to reimbursement reduced by 1.16 years; ~5 quarters) and 2015-16 (-1.88 years; ~8 quarters).

The outcome of interest was the undiscounted life-years gained (LYG) obtained from the reduced time to reimbursement, estimated with the distribution transition method, which enabled the evaluation of population impact at the 2021Q1 level.

The number of patients benefitting from the faster access was estimated as the sum of new patients initiating the examined treatment in the past 5/8 quarters. If medicine had not been reimbursed for 5/8 quarters, the last quarterly observation was carried forward. The analysis assumes that peak utilization was already reached by 2020Q1 with all medicines.

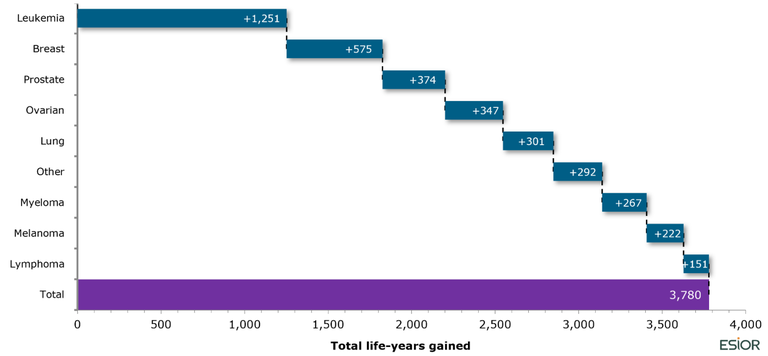
The number of affected patients was multiplied by the average LYG related to the condition, which was obtained from relevant NICE evaluations.

RESULTS

By 2021Q1, the Finnish CRS had had an impact on the reimbursement decisions and patient access to 26 drugs for 13 different oncological and hematological indications.

The CRS had resulted in 3,780 (**Figure 1**) to 5,299 LYGs (not shown) for the Finnish patients, depending on the length of the control period. Among subgroups, leukemia, breast cancer, and prostate cancer demonstrated the highest gains, most likely reflecting the number of new medicines available, as well as the size of these populations.

Figure 1. Life-years gained with the conditional reimbursement system in oncology and hematology by indication between 1/2018 and 3/2021.



The method does not fully consider the higher probability of reimbursement with CRS, nor the peak sales taking place after 2021Q1. In addition, the utilized LYG weights were considerably low for some indications (e.g., prostate cancer).

The Finnish conditional reimbursement system (CRS) is related to considerable life-expectancy gains in oncology and hematology due to improved patient access to new medicines.

The analysis was rather conservative; the average life-year estimates and affected patient populations are likely to be severely underestimated for some conditions and medicines.

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