

Direct and Indirect Costs Associated with Chronic Lymphocytic Leukemia in Slovakia: 5 Years' Overview

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OBJECTIVES

The main study objective was to calculate direct and indirect costs associated with the Chronic Lymphocytic Leukemia (CLL) in Slovakia. Due to continual increase in CLL prevalence and incidence, it is important to have more accurate insight into CLL overall burden. CLL typically progresses more slowly than other types of leukemia and in 2019 we treated more than 4000 patients.

METHODS

We performed retrospective analysis of the health insurance and social insurance records from 2015 till 2019 with application of the cost of illness (COI) methodology. COI is a summary of the costs of a particular disease to society. This value includes direct costs of treating the disease and indirect costs such as productivity loss resulting from time off employment, in our case absenteeism and disability. We estimated resource utilisation by health insurance and social insurance companies only, since there is no current CLL patients' registry.

RESULTS

Direct costs including any kind of diagnostics procedures, treatment and/or hospitalisation increased from €8,87 million in 2015 to €13,98 million in 2019. CLL diagnostic procedures were responsible for 64% of all direct costs, treatment costs including pharmacotherapy was responsible for 31% of total costs and 5% attributed to in-patient care (stay in the hospital longer than 48 hours). Indirect costs associated with absenteeism due to CLL climbed from €25 747 in 2015 to €113 781 in 2019 and disability costs climbed from €67 202 in 2015 to €125 833 in 2019. Our estimation is that in 2030 the yearly direct costs will increase to €25,72 million using 5,7% increase rate base on the long term yearly prevalence evolution by WHO.

CONCLUSIONS

CLL onset is usually in retirement age, however more people in productive age are suffering from this disease. More prudent approach to this diagnosis is needed to manage the future CLL burden.

Direct costs, Chronic Lymphocytic Leukemia (CLL) in Slovakia

	2014	2015	2016	2017	2018	2019
Diagnostic procedures	€4 252 993	€4 144 423	€4 701 022	€6 737 279	€9 281 920	€8 933 037
Pharmacotherapy	€3 529 079	€3 417 526	€4 801 082	€3 575 801	€3 257 469	€4 286 022
In-patient care	€1 357 338	€1 310 767	€1 801 361	€866 149	€628 543	€758 138
Total	€9 139 410	€8 872 716	€11 303 465	€11 179 230	€13 167 931	€13 977 198

Indirect costs, Chronic Lymphocytic Leukemia (CLL) in Slovakia

	2014	2015	2016	2017	2018	2019
Abseteeism	€31 464	€25 747	€58 221	€63 869	€81 952	€113 781
Disability	€94 835	€67 202	€90 653	€92 163	€120 020	€125 833
Total	€126 300	€92 950	€148 874	€156 032	€201 972	€239 613