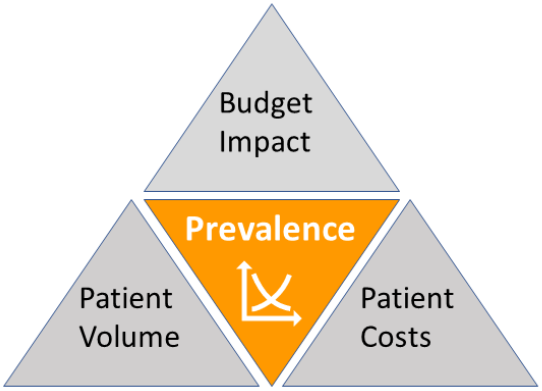

Swiss Payer RWD

Is there a prevalence dependence of best-selling drugs?

Prevalence – Impact on P&R Decision?

This newsletter examines whether associations can be found between drug sales, treatment costs per patient and treatment prevalence for the best-selling Swiss medicines for 2019.

Background

Disease prevalence is one of several factors that justify a high price tag for orphan and ultra-orphan drugs. The small number of patients must be reflected in significantly higher treatment costs per patient to amortize R&D costs and achieve a reasonable profit for investors. Several studies demonstrate a relationship between treatment costs and prevalence for Orphan drugs [1], [2], [3], [4], [5]. The role of prevalence in pricing and reimbursement for non-Orphan drugs seems to have been less studied.

« The role of prevalence in Pricing & Reimbursement for Non-Orphan drugs seems to have been less studied. »

Method

The basis was the study conducted by pharmaLevers on behalf of the Swiss Health Insurance Association curafutura [6] on the 20 best-selling medicines in Switzerland for 2019. The number of patients treated with a specific drug for 2019 was taken from the Annual Drug Report (2020 edition) [7] of the Swiss health insurer Helsana (available for 15 of 20 drugs). Average treatment costs per patient were calculated by dividing drug sales by the number of patients. Finally the treatment prevalence was calculated from the number of treated patients in relation to the Swiss Population in 2019 (BFS) per 100,000. Different scales and trend lines were used to investigate associations and correlations.

Results

Figure 1: shows the blue Swiss product sales line in linear scale, while treatment costs per patient (orange) and treatment prevalence (grey) are shown in logarithmic scale. As with orphan drugs (see background), there appears to be a correlation between treatment costs per patient and the prevalence of treatment. This correlation becomes clearer on the linear scale for patients' treatment costs (orange line in Figure 2).

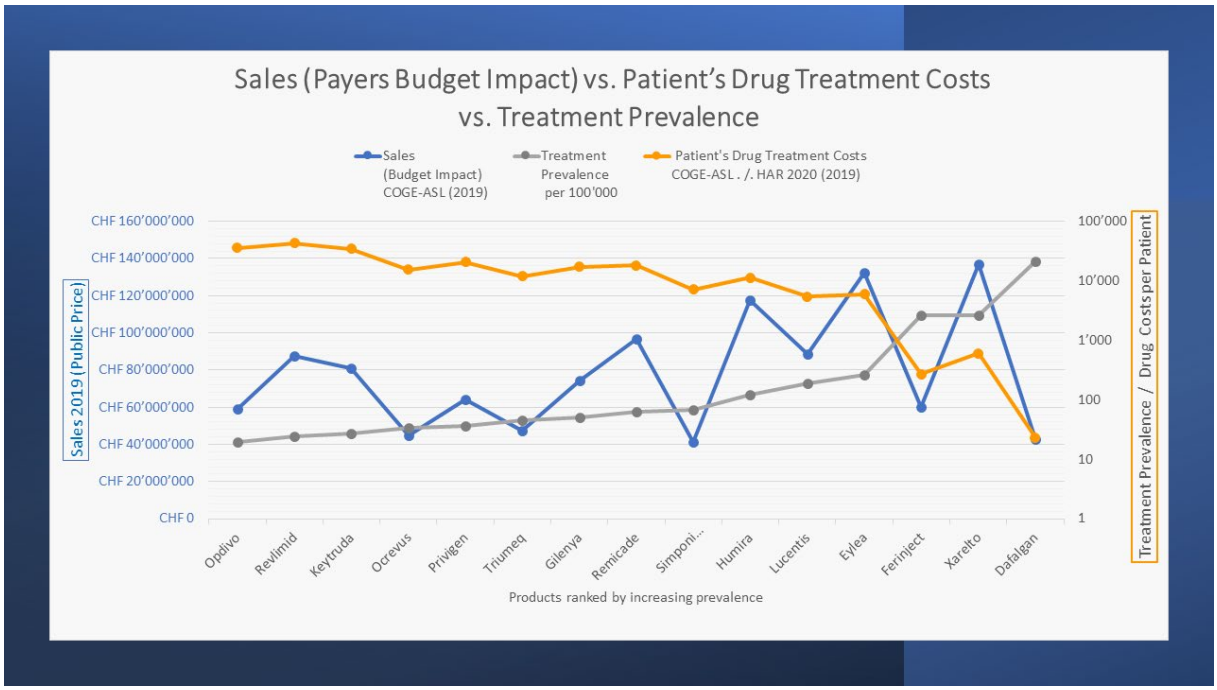

Figure 1: Overview sales (payers budget impact) vs. patients' treatment costs vs treatment prevalence

Figure 2: shows the correlation between treatment costs per patient (orange line on linear scale) and treatment prevalence (grey line on the logarithmic scale). The R^2 values of the trend line come from Excel trend line calculation either linearly (treatment cost) or exponential (treatment prevalence).

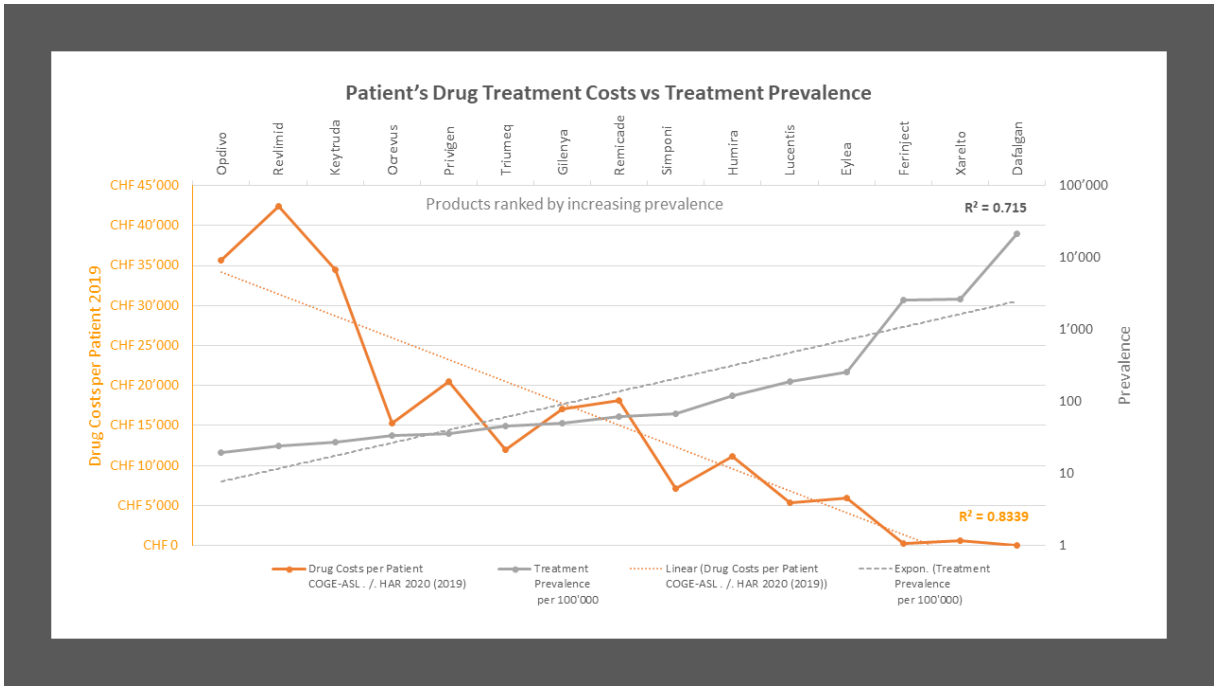

Figure 2: Patient's drug treatment costs versus treatment prevalence

« Treatment costs per patient for the best-selling Swiss products appear to correlate with the prevalence of treatment, as has been shown for orphans. »

Figure 3: shows Swiss product sales (blue) and treatment costs per patient (orange) in linear scale. No link could be established between Swiss product sales and per patients' treatment costs.

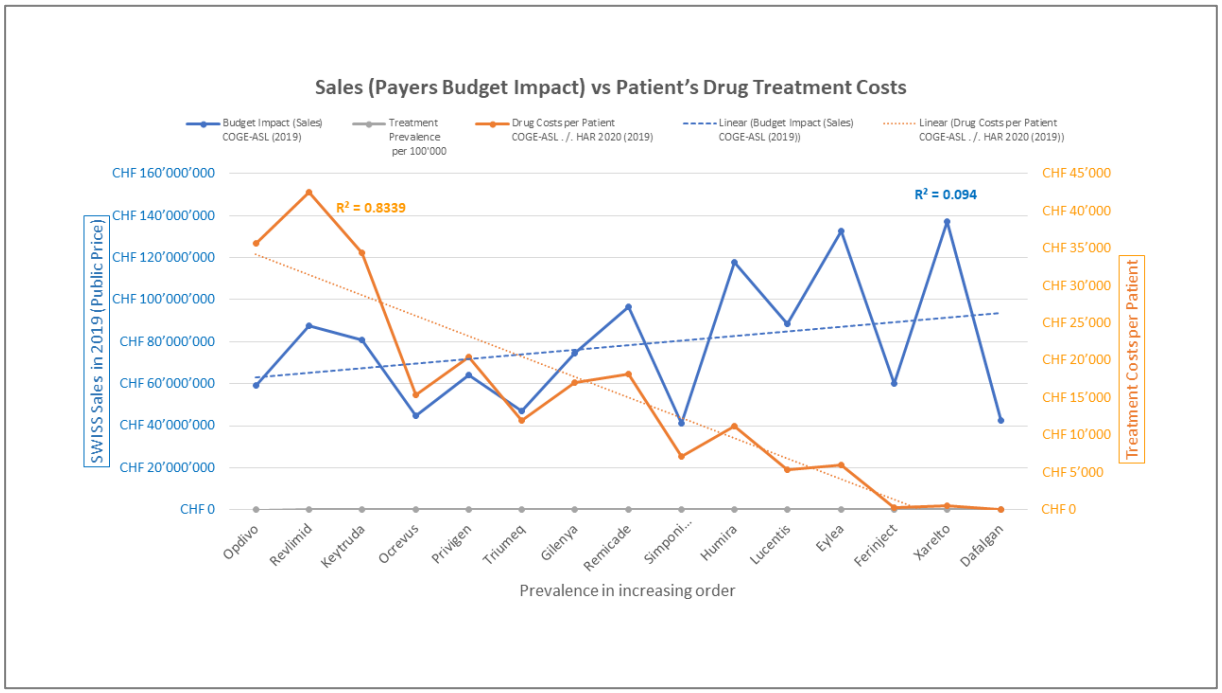

Figure 3: Sales (payers budget impact) versus patient's drug treatment costs

« No link could be established between Swiss product sales level and per patients' treatment costs. »

Discussion

Patient figures from the Helsana Report 2020 were available for fifteen of the 20 best-selling Swiss medicines in 2019. The fifteen selected drugs are available in the Swiss Positive List (SL) from one to two years to over 20 years; This means that price adjustments have been made for many of them over time. Six immunosuppressive, three hematological, two oncological, two ophthalmological, one antiviral and one (old) painkiller were included. Given this broad spectrum of different drugs and indications over a lengthy period of P&R decisions, it is not surprising that hardly any correlation could be found between Swiss product sales and both treatment prevalence and treatment costs of patients. However, it was quite surprising to see that the treatment costs per patient appears to correlate with the prevalence of treatment, as it is often the case with Orhan drugs (see background above). The reason a correlation between treatment costs per patient and treatment prevalence could be shown without finding a relationship between sales and prevalence could not be determined. Do you have an explanation for this? Your input is highly appreciated.

« The reason a correlation between treatment costs per patient and treatment prevalence could be shown without finding a relationship between sales and prevalence could not be determined. Do you have an explanation for this? Your input is highly appreciated. »

It makes little sense to set a comparable price for medicine with comparable treatment prevalence, because prevalence has nothing to do with benefit and quality. As in the past, the price should be based primarily on medical needs and clinical added benefit. Orphan drugs are available at different prices despite similar prevalence. Prevalence or population size is only one of the decisive P&R factors, along with unmet needs, available alternatives, added value, comparator, data quality, etc. For very small population sizes, the average annual cost of treatment (AATC) can vary significantly [8]. In addition, there are studies that have found no association between sales volumes and prevalence for orphans [5], which is consistent with this study.

Conclusion

« For medicinal products, prevalence should be used as a criterion and not as a determining factor for both initial pricing and medium or long-term cost control. Price and volume agreements are a more appropriate means of jointly controlling and balancing the uncertainties of population size and market development between pharmaceutical companies and payers. »

Limitation

This newsletter pragmatically examines a link between the Swiss top sales products and their treatment prevalence in 2019. Any interpretations and conclusions should be considered as indications only. Treatment prevalence was used which is normally lower than disease prevalence (not all patients are treated) but could also be higher in some cases (off label use). For product sales COGE-ASL data with a coverage of 92-95% were used. These values may differ from the Helsana extrapolation for Switzerland as a whole. Average treatment costs per patient have been used; the cost of treatment per patient may vary depending on the dose and duration of treatment. Completeness and correctness are not claimed; Additions, corrections and comments are welcome.

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