

# Estimating Rare Disease Incidence and Prevalence of Essential Thrombocythemia in Major Health Plans in the United States

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## KEY FINDINGS & CONCLUSION

- Wide variation exists in both prevalence and incident patient estimates across US commercial health plans.
- This variability can affect eligibility for NCCN recommended ET cytoreductive therapies and formulary policy recommendations.

## INTRODUCTION

- Essential thrombocythemia (ET) is a rare myeloproliferative neoplasm (MPN) with risks of thromboembolic events and progression to myelofibrosis or acute myeloid leukemia.
- Current ET treatment landscape is limited despite the lack specificity of prior ICD-10 diagnosis coding and ET patient medical expenditures being 2.3 times greater versus matched comparisons.

## OBJECTIVE

- To estimate the ET incident and prevalent patient populations eligible for National Comprehensive Cancer Network (NCCN) guideline driven treatments among major US health plans.

## METHODS

- A systematic literature assessment identified epidemiologic estimates to determine the prevalence and incidence of ET, the revised IPSET-thrombosis risk stratification (rIPSET-T) distribution and patients eligible to receive NCCN 1.2025 recommended ET cytoreductive therapy options.
- Health plan membership data from the eight largest commercial health plans was determined from Earning releases, Annual and 10-K reports (**Table 1**).
- The data was incorporated into Microsoft Excel to create model inputs and calculate the base-case analysis of a clinically treatment eligible population that may potentially receive NCCN recommended treatments.

Table 1. United States health plan membership data

| US Health Plan     | Number of Lives Covered  |
|--------------------|--------------------------|
| All Blues Plans    | 118,000,000 <sup>1</sup> |
| Elevance           | 45,734,000 <sup>2</sup>  |
| United Health Care | 49,345,000 <sup>3</sup>  |
| CVS                | 27,095,000 <sup>4</sup>  |
| Centene            | 28,600,600 <sup>5</sup>  |
| Cigna              | 19,147,000 <sup>6</sup>  |
| Humana             | 16,347,100 <sup>7</sup>  |
| Molina             | 5,535,000 <sup>8</sup>   |

## RESULTS

- Sixteen references identified the epidemiology<sup>9-14,22</sup>, rIPSET-T distribution<sup>15-19</sup>, and utilization of NCCN recommended treatment options<sup>15-18,20-21</sup> in separate systematic literature searches.
- Of the 8 health plans assessed, the mean and median lives covered were 38,725,462 and 27,847,800 respectively.
- A mean 426 (SD±362) and 12,164 (SD±14,379) incident and prevalent ET NCCN cytoreductive therapy eligible patients among US health plans were identified (**Table 2**).

Table 2. Mean (SD) incident and prevalent ET NCCN cytoreductive therapy eligible patients among US health plans

| US Health Plan     | Incident Point Estimate | Prevalent Point Estimate |
|--------------------|-------------------------|--------------------------|
| All Blues Plans    | 1,298                   | 51,542                   |
| Elevance           | 503                     | 19,977                   |
| United Health Care | 543                     | 21,554                   |
| CVS                | 298                     | 11,835                   |
| Centene            | 315                     | 12,493                   |
| Cigna              | 211                     | 8,363                    |
| Humana             | 180                     | 7,140                    |
| Molina             | 61                      | 2,418                    |
| Mean               | 426                     | 12,164                   |
| Standard Deviation | ±362                    | ±14,379                  |

- Among the ET health plan(s) population, a mean of 192 (SD±109), and 8,797 (SD±7,479) in incident high-and prevalent intermediate and high-rIPSET-T eligible patients were identified, respectively (**Table 3**).

Table 3. Mean (SD) incident high-and prevalent intermediate and high-rIPSET-T eligible patients among the ET US health plans population

| US Health Plan     | Incident High rIPSET-T | Prevalent Intermediate / High-rIPSET-T |
|--------------------|------------------------|----------------------------------------|
| All Blues Plans    | 584                    | 26,806                                 |
| Elevance           | 226                    | 10,390                                 |
| United Health Care | 244                    | 11,210                                 |
| CVS                | 134                    | 6,155                                  |
| Centene            | 142                    | 6,497                                  |
| Cigna              | 95                     | 4,350                                  |
| Humana             | 81                     | 3,714                                  |
| Molina             | 27                     | 1,257                                  |
| Mean               | 192                    | 8,797                                  |
| Standard Deviation | ±109                   | ±7,479                                 |

- The median percentage of NCCN identified treatment eligible patients was 67.0% representing a mean of 128 (SD±109) and 5,100 (SD±4,335) of incident and prevalent patients, respectively.

## LIMITATIONS

- Variability of incidence and prevalence values reported in the literature have not been incorporated into the current analyses.

## CONCLUSIONS

- Wide variation exists in both prevalence and incident patient estimates across US commercial health plans.
- This variability can affect eligibility for NCCN recommended ET cytoreductive therapies and formulary policy recommendations.

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