

# Measuring the reach and impact of plain language summary publications



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## > Objectives

- Standalone plain language summary publications (PLSPs) aim to increase the accessibility of scientific research, but their reach and impact are unknown
- Online mentions of PLSPs are particularly important to increase visibility to audiences

outside of those who normally engage with publications via journal websites and literature databases

- This analysis aimed to measure the attention received by PLSPs and whether this also drove awareness of corresponding original articles

## > Methods

- A literature search was conducted to find standalone PLSPs summarizing the results of industry-sponsored clinical trials
- For each PLSP the corresponding original article(s) were identified

- Altmetric was used to quantify online attention received by original articles and PLSPs and how this changed over time

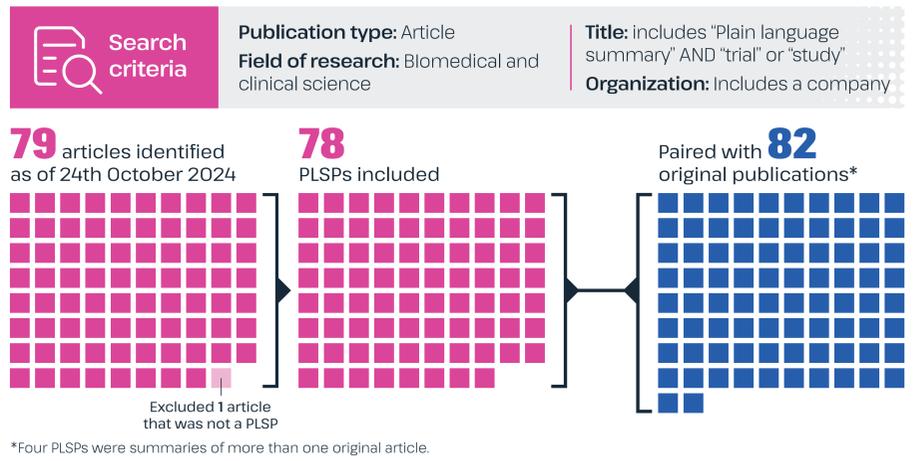
## > Results

- As of October 24, 2024, 78 relevant PLSPs were identified and paired with 82 original articles (four PLSPs summarized more than one original article). The earliest PLSP identified was from November 2021 (Figure 1)
- Most original articles (46/82, 56%) were in oncology, followed by respiratory medicine (8/82, 10%) and immunology (7/82, 9%)
- The most frequent journal for publication of the original articles was *The New England Journal of Medicine* (26/82, 32%), followed by *The Lancet Oncology* (6/82, 7%) and *The Lancet* (6/82, 7%)
- Median time between original article and PLSP publication was 54.5 weeks (interquartile range [IQR] 32-83), and median time since publication of PLSPs was 53 weeks (IQR 27-78)
- In total, 17,402 Altmetric mentions of original articles were identified, with median 115

mentions per article (IQR 15-275). Most mentions were X posts (67%) or news stories (30%) (Figure 2). Twenty-one publications had fewer than 20 lifetime Altmetric mentions and were excluded from the rest of the analysis

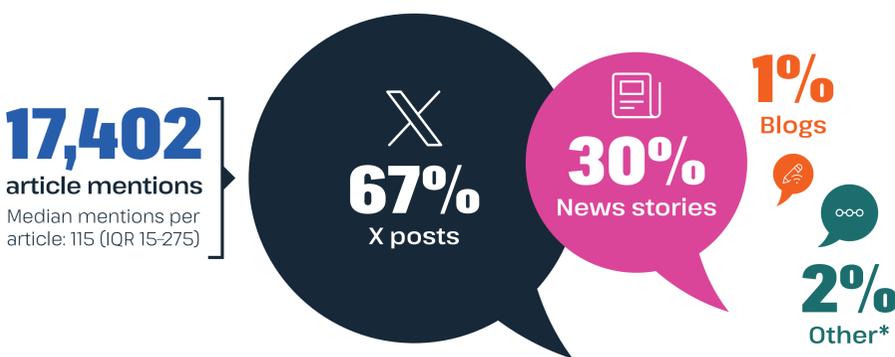
- Original articles received the majority of their lifetime online attention before PLSP publication, with 46 of 61 (75%) original articles having achieved 90% of lifetime mentions before that point (Figure 3)
- No increase in online attention coincided with PLSP publication overall (Figure 4) or in the 15 publications that had yet to receive 90% of lifetime attention before PLSP publication (data not shown)
- PLSPs had a median Altmetric attention score of 1 (IQR 0-6) and were published in journals with an average impact factor of 2.8

Figure 1 Search criteria and results



\*Four PLSPs were summaries of more than one original article.

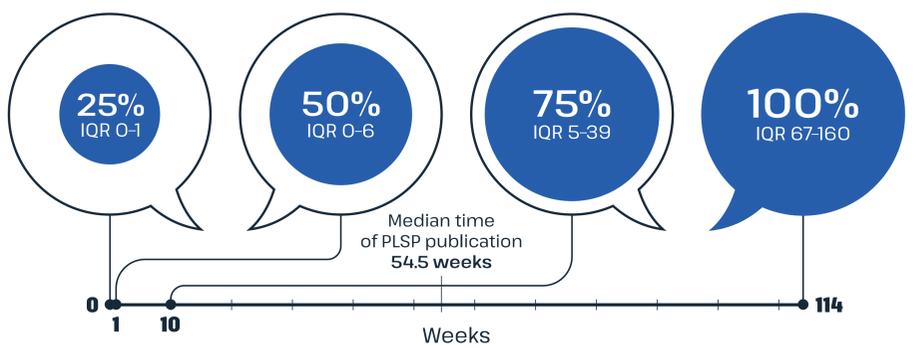
Figure 2 Breakdown of online mention types



N=82; Number of mentions as of November 5, 2024.

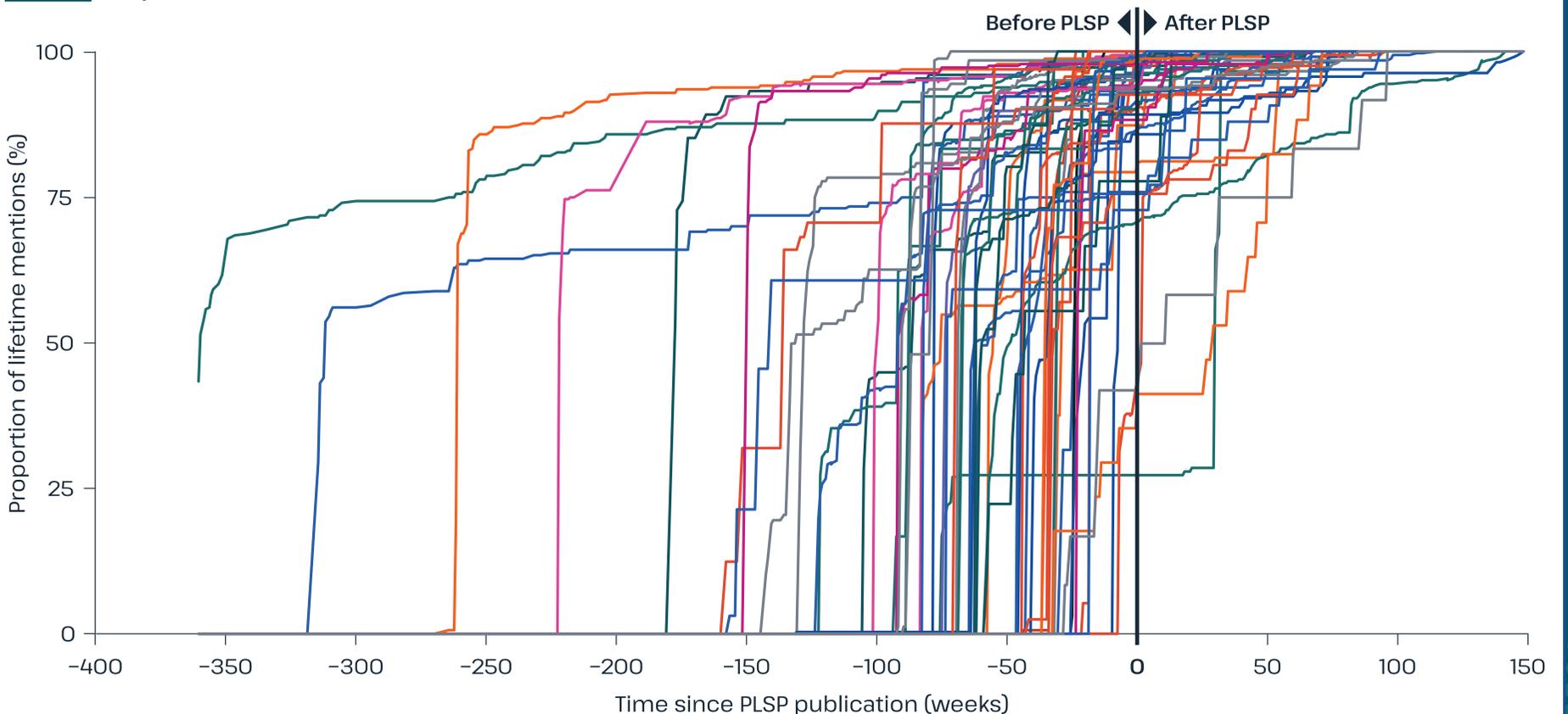
\*Other includes Facebook posts, patents, policy documents, Wikipedia, Videos, Reddit posts, F1000 posts, Google+ posts, and mentions on peer review forums. Each accounted for <1% of mentions.

Figure 3 Median time taken for an original article to achieve proportions of lifetime mentions



N=61 with 21 publications with Altmetric <20 excluded from the analysis.

Figure 4 Proportion of lifetime mentions achieved over time



N=61 with 21 publications with Altmetric <20 excluded from the analysis; Day 0 corresponds to publication date of PLSP with negative numbers representing days before publication of PLSP.

## > Conclusions

- While it may be expected that publication of a PLSP will draw further attention to the original article, no such effect was seen based on online attention according to Altmetric
- An analysis of mentions over time shows that clinical research receives most attention in the weeks immediately following publication; this might make it difficult to see any effect of the PLSP

- However, PLSPs themselves appear to attract limited attention online compared with original articles, so it is possible that they are not visible outside of journal websites and publication databases—both channels that would not be used by lay audiences
- While PLSPs may receive attention through channels not captured in this analysis, these data highlight the need for proactivity to ensure

- PLSPs reach the audiences who need them. **This could include efforts to increase awareness and measure attention among relevant clinical audiences to support their interactions with patients**
- Given that clinical research articles attract most attention at the time of publication, simultaneous publication of PLSPs may be beneficial

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### Disclosures

J Serginson, E Ogunnowo, L Da Silva, and E Millar are employees of HCG; L Roch is an employee of Boehringer Ingelheim.