

***An analysis of the Swedish Drug
Development Pipeline
May, 2008***

swedenBIO
The Swedish Life Science Industry Organization


Invest in Sweden Agency



A Survey of the Swedish Drug Development Pipeline

- In March-April 2008 a survey of the Swedish Drug Development Pipeline was conducted by SwedenBIO in cooperation with Invest in Sweden Agency (ISA) and VINNOVA.
- The survey includes projects originating and developed in Sweden *.
- SwedenBIO, ISA and VINNOVA will use the results to promote the Swedish Drug Development industry and to generate business contacts.
- SwedenBIO, ISA and VINNOVA would like to thank all the participating companies.
- An overview of projects originating from AstraZeneca as well as an overview of clinical trials performed in Sweden are summarized in the Appendices.

Summary

- The Swedish Drug Development pipeline has increased with 32 projects to 142 since last year's analysis.
- The number of Drug Development companies remains constant at about 50.
- The projects from previous years have matured through the clinical phases and 2008 15 projects were in phase III, compared to 11 projects in 2007.
- The dominating therapeutic categories are infectious disease, cancer-related conditions and neurological disorders.
- A significant proportion of the projects originate from collaboration with academia.

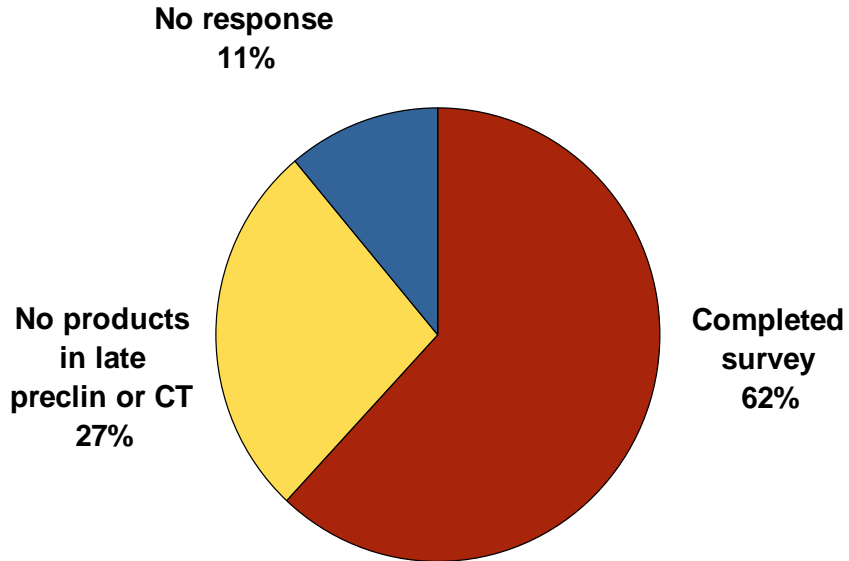
Appendix

A, Globally AstraZeneca has almost as many projects in their pipeline as all of the Swedish Drug Development companies.

B, Sweden is an attractive country for clinical trials.

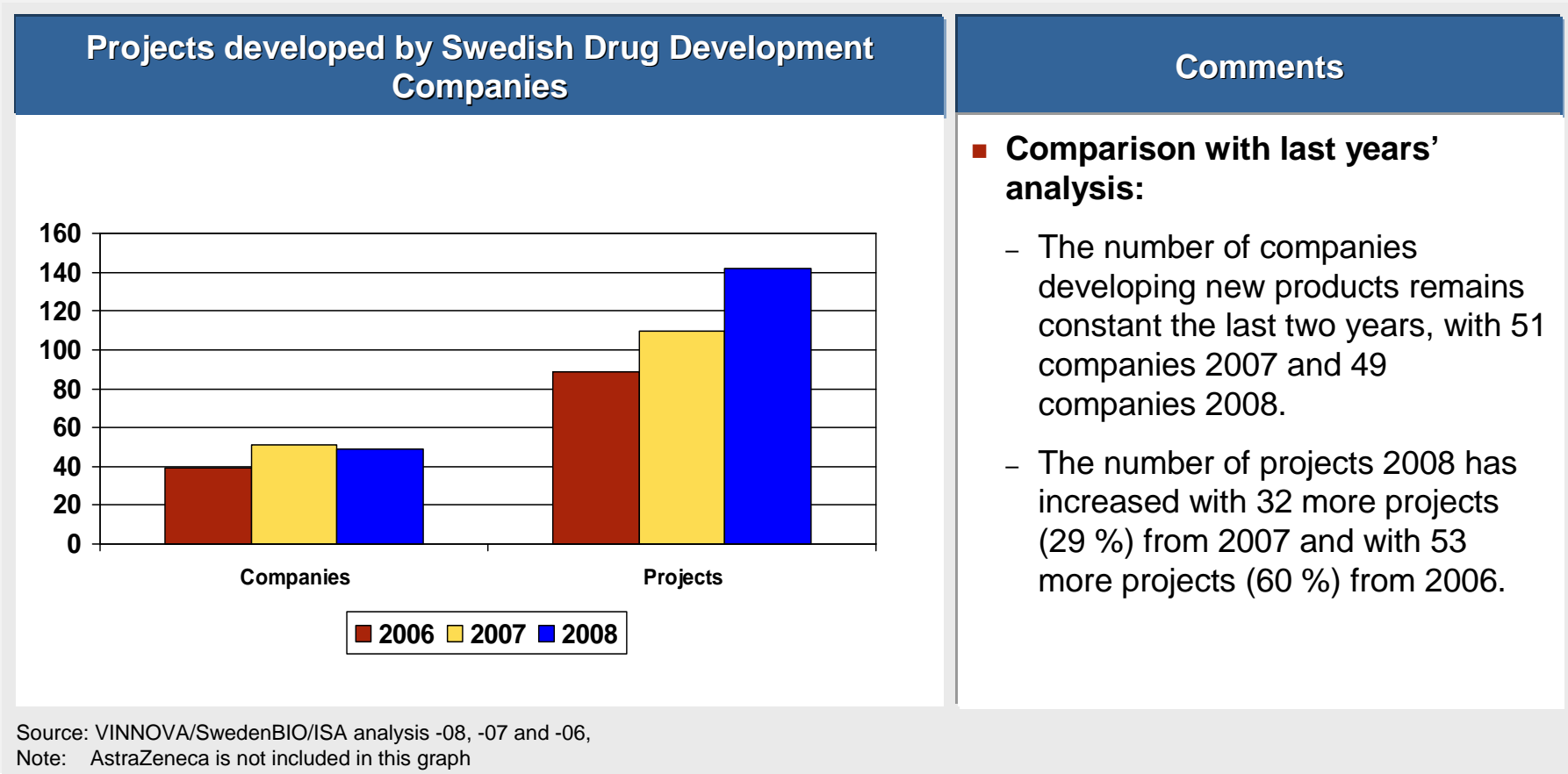
Swedish Drug Development Pipeline 2008 – Survey details

79 companies were contacted about the survey and 70 responded

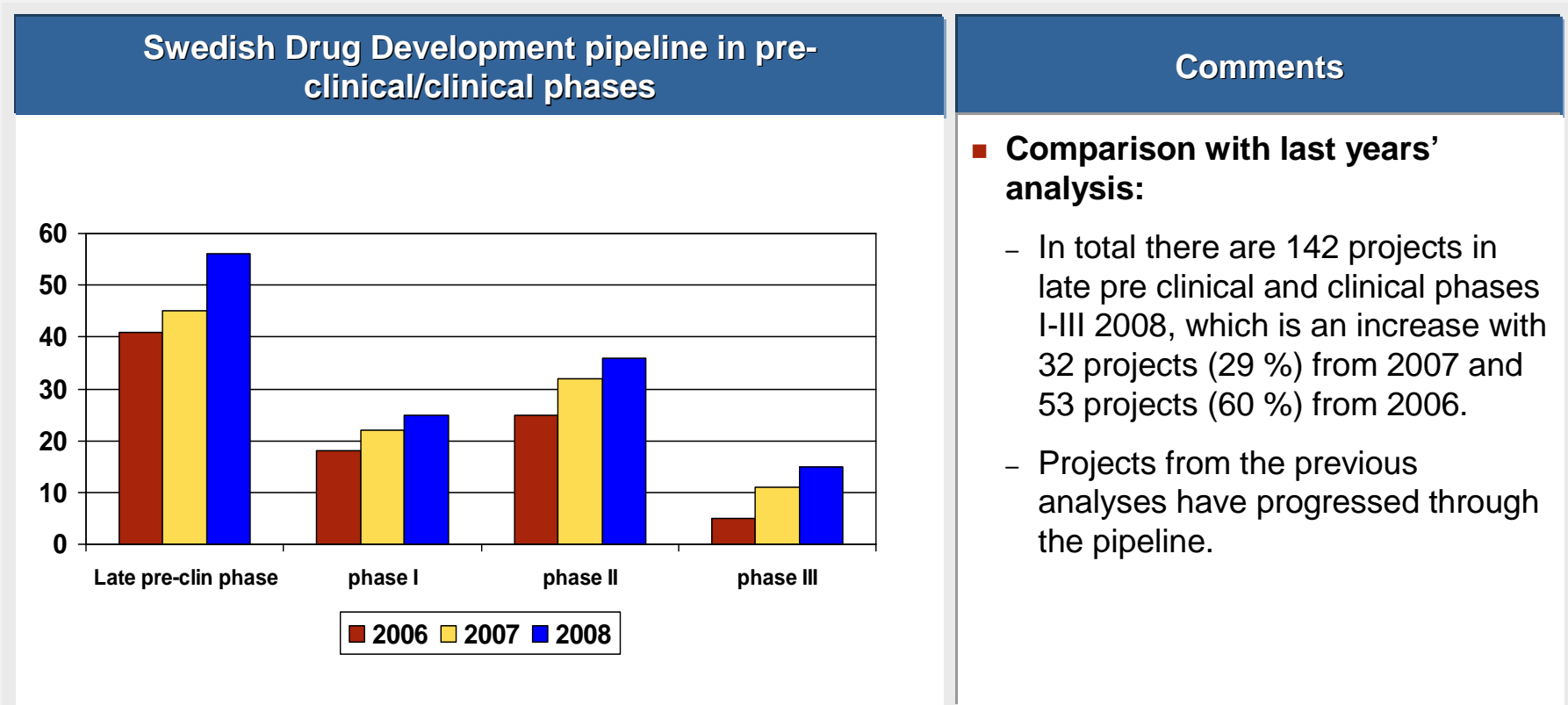
Response to the survey	Comments								
 <p>A pie chart illustrating the response to the survey. The chart is divided into three segments: a large red segment representing 'Completed survey' at 62%, a yellow segment representing 'No products in late preclin or CT' at 27%, and a small blue segment representing 'No response' at 11%.</p> <table border="1"><thead><tr><th>Response Category</th><th>Percentage</th></tr></thead><tbody><tr><td>Completed survey</td><td>62%</td></tr><tr><td>No products in late preclin or CT</td><td>27%</td></tr><tr><td>No response</td><td>11%</td></tr></tbody></table>	Response Category	Percentage	Completed survey	62%	No products in late preclin or CT	27%	No response	11%	<ul style="list-style-type: none">■ 79 companies¹ were contacted about participating in the survey.■ 21 companies (27 %) stated that they only had projects in earlier phases.■ 9 companies either did not reply or stated that they did not wish to participate because of confidentiality agreements etc.■ In this presentation, only companies (49 for 2008, 51 for 2007 and 39 for 2006) with projects in late pre-clinical phase (<12 months from entering Phase I) or clinical trials (CT) have been included in the statistics. <p>¹ 115 companies were scrutinized to select those with potentially relevant projects</p>
Response Category	Percentage								
Completed survey	62%								
No products in late preclin or CT	27%								
No response	11%								

Source: Interviews, VINNOVA/SwedenBIO/ISA analysis May -08,
Note: AstraZeneca is not included in this graph

Activity has increased - the same number of companies today manage 32 more projects than last year



The Swedish Drug Development pipeline 2008*, has increased with 32 to a total of 142 projects in late-pre clinical and clinical phases



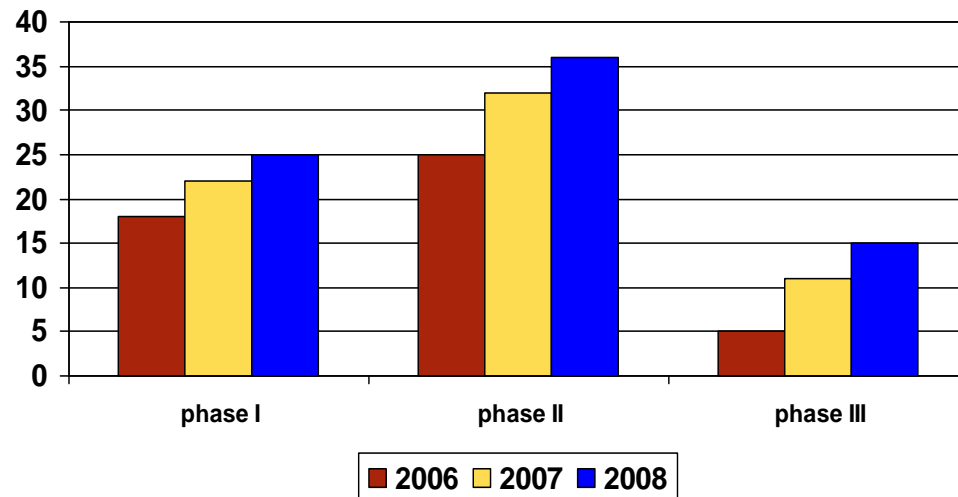
Source: VINNOVA/SwedenBIO/ISA analysis -08, -07 and -06,

* Note: AstraZeneca is not included in this graph

Swedish Drug Development Pipeline 2008 – Overview

The Swedish Drug Development pipeline 2008*, has increased with 11 to a total of 76 projects in clinical phases I-III

Swedish Drug Development pipeline in clinical phases



Comments

■ **Comparison with last years' analysis:**

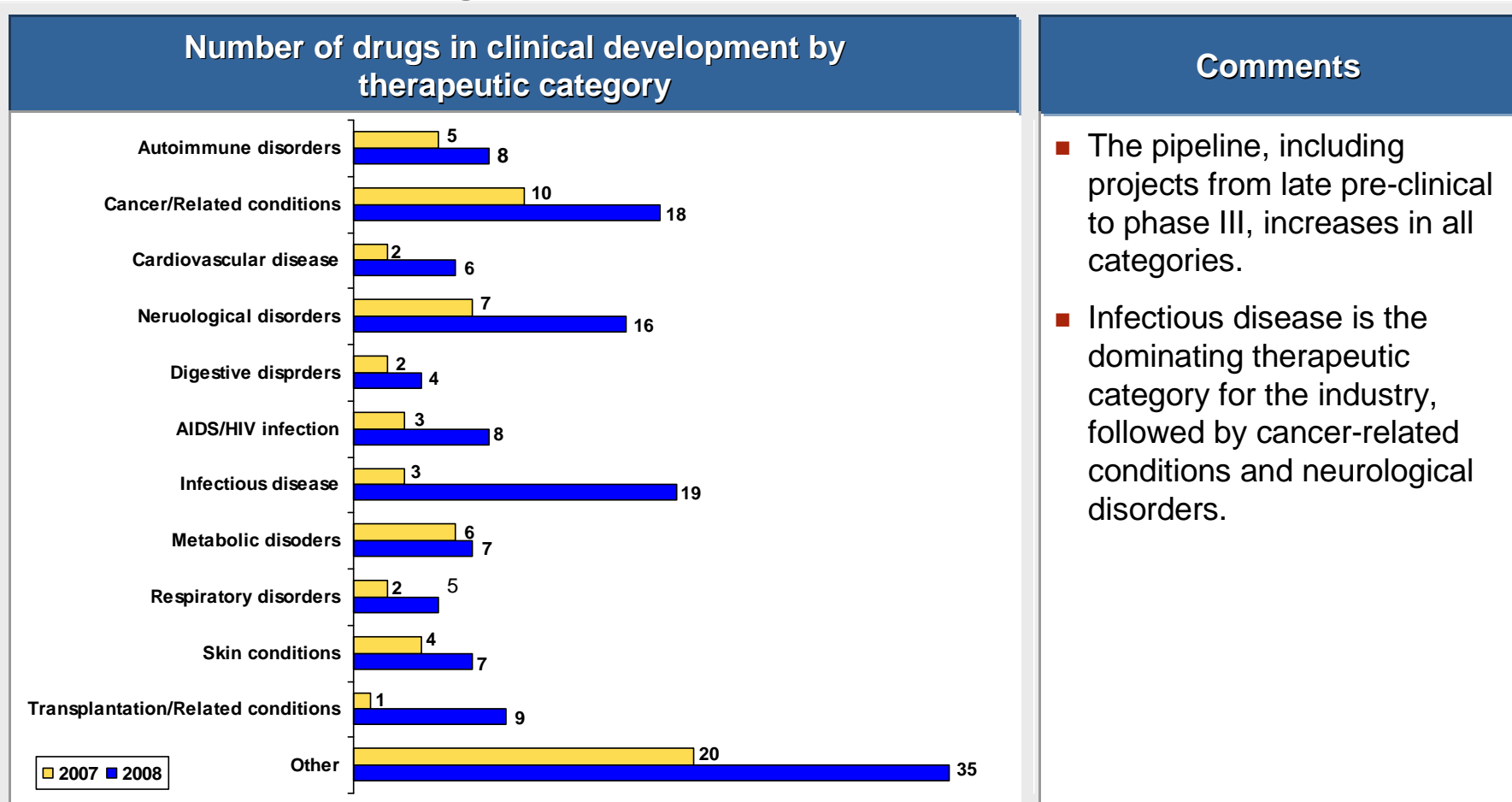
- In total there are 76 projects in clinical phases I-III 2008, which is an increase with 11 projects (17 %) from 2007 and 28 projects (60 %) from 2006.

Source: VINNOVA/SwedenBIO/ISA analysis -08, -07 and -06,

* Note: AstraZeneca is not included in this graph

Swedish Drug Development Pipeline 2008 – Comparison 2007 and 2008 by therapeutic category

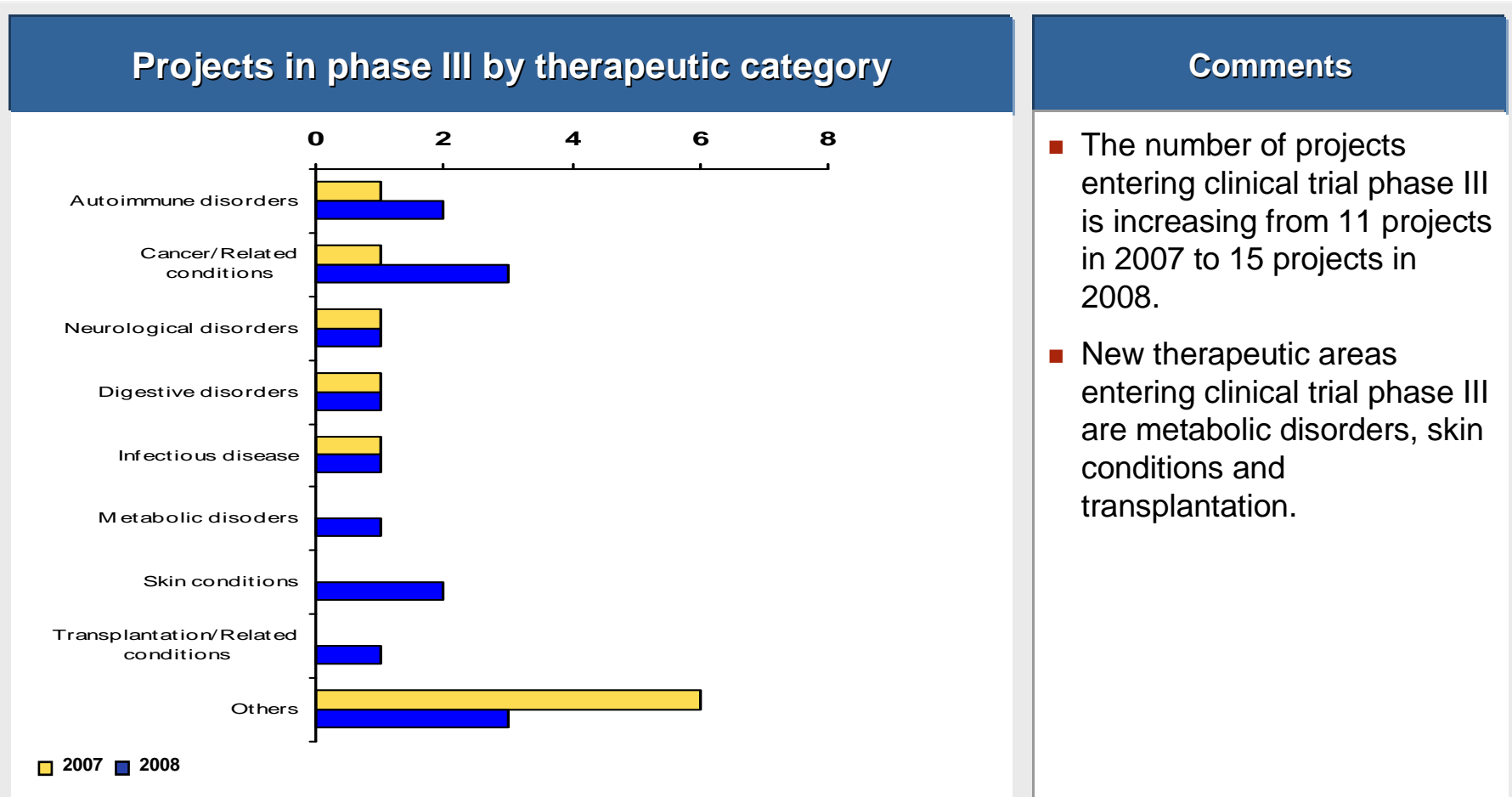
The dominating therapeutic categories are infectious disease, cancer-related conditions and neurological disorders



Source: VINNOVA/SwedenBIO/ISA/analysis -07 and -08,
 Note: AstraZeneca products are not included in this graph

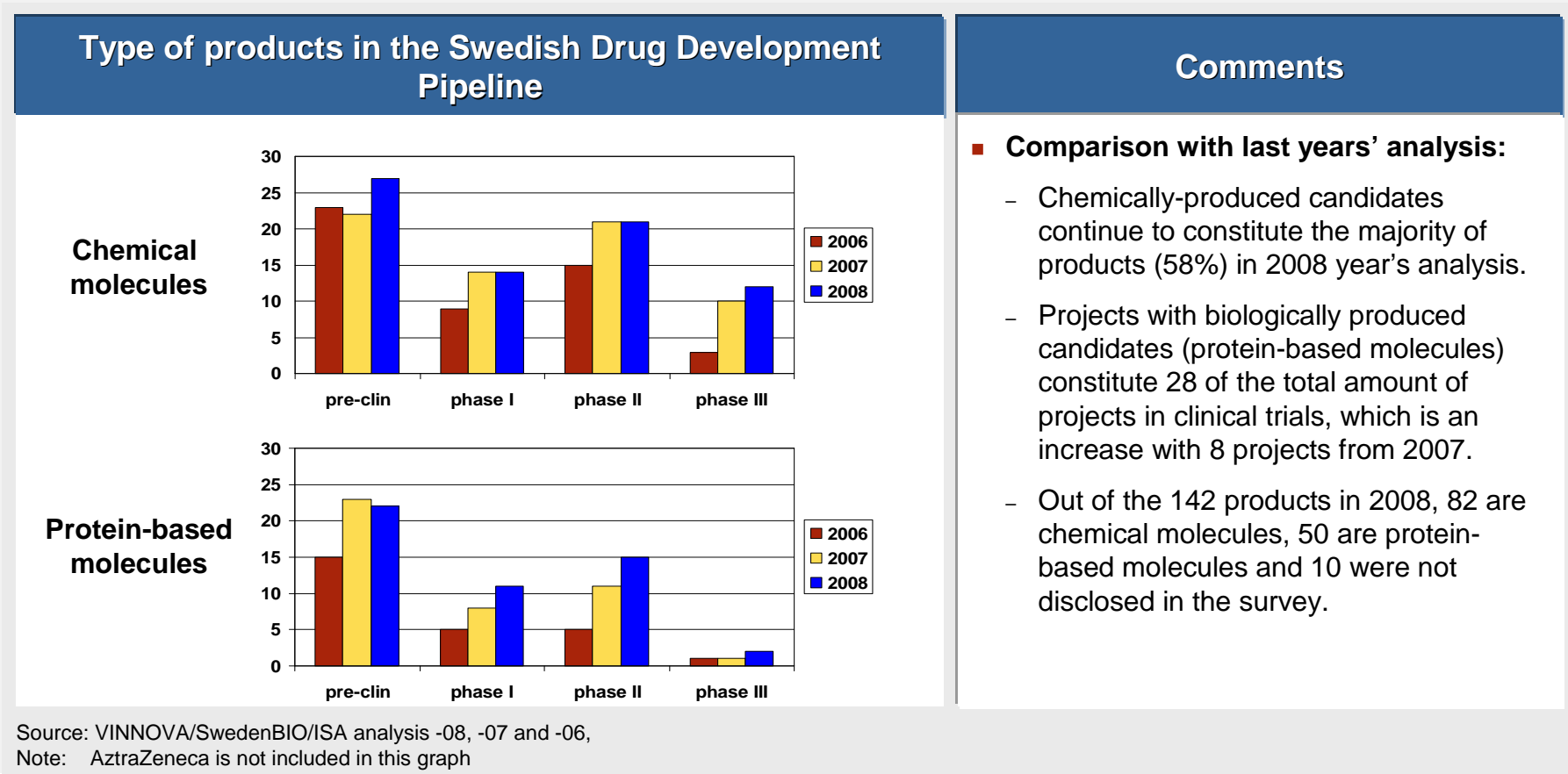
Swedish Drug Development Pipeline 2008 – Comparison phase III 2007 and 2008 by therapeutic category

The Swedish pipeline 2008 has increased with 4 to 15 projects in phase III



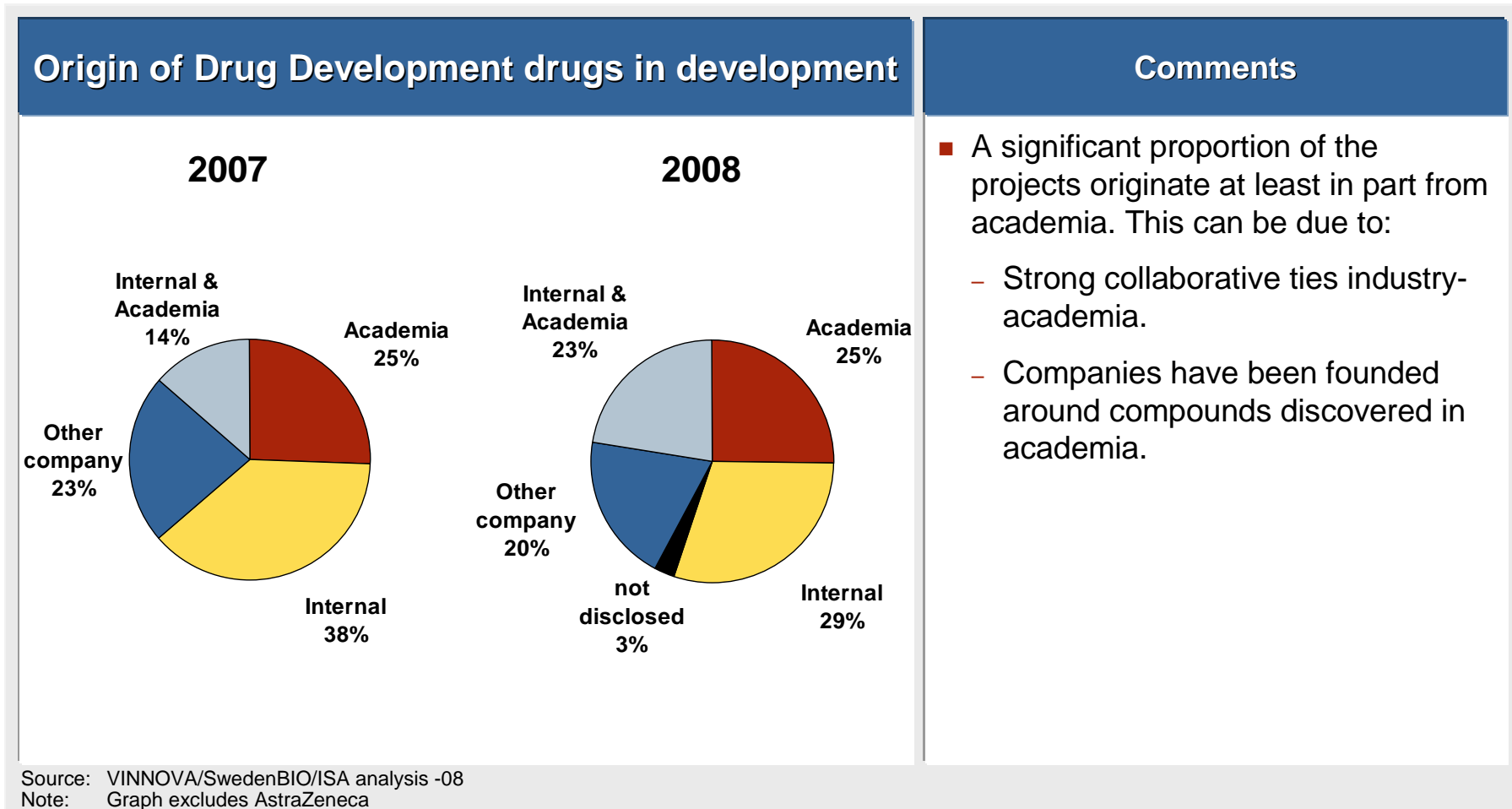
Source: VINNOVA/SwedenBIO/ISA/analysis -07 and -08,
Note: AstraZeneca products are not included in this graph

Biologically produced candidates show the most prominent increase, but chemical molecules still in majority with 82 studies



Swedish Drug Development Pipeline 2008 – Origin of innovation

Collaboration with academia continues to grow and be the largest source of projects



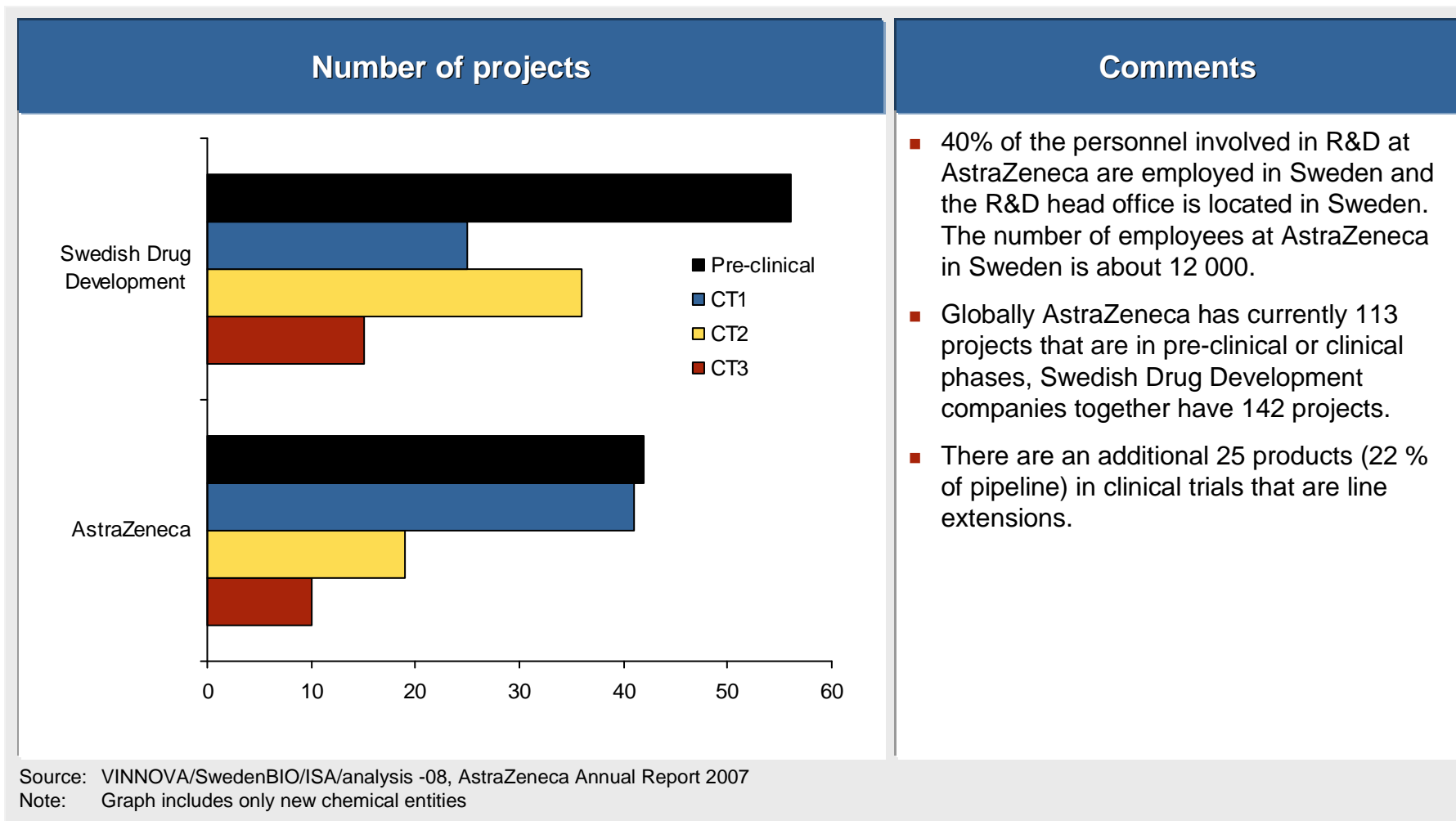
Conclusion

- The pipeline advances both in number and in progress.
- The activity has increased, since the same number of companies are now managing 11 more projects in the clinical phases I-III. In addition, more of the projects are in later phases than last year.
- Academia is still a very important contributor to the innovative research and the close links between academia and industry facilitates the development of the pipeline.
- The Swedish companies pursue more protein-based projects, thereby following the global trend. In this area Sweden has an advantage compared to many other countries thanks to the legacy of Kabi Vitrum and Pharmacia.

Appendix A

Swedish Drug Development Pipeline 2008 – AstraZeneca versus the Drug Development sector

Globally AstraZeneca has as many projects in clinical trials as all of the Swedish Drug Development companies together



Appendix B

Swedish Drug Development Pipeline 2008 – Clinical Trials in Sweden

Sweden is an attractive country for clinical trials

