

# My day with Oncology Pharmacy - Switzerland

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## 1. Introduction

In form of an ESOP survey in March and April 2022, professionals were asked about their working situation in preparation of read-to-use cytotoxic drugs. All relevant daily working processes as activities in prescription and validation of cytotoxic drugs as also their clinical pharmaceutical support in patient care are addressed. This poster presents the country specific evaluation.

## 2. Material and method

The survey with 18 questions was translated into different languages and performed nationally using a web based application.

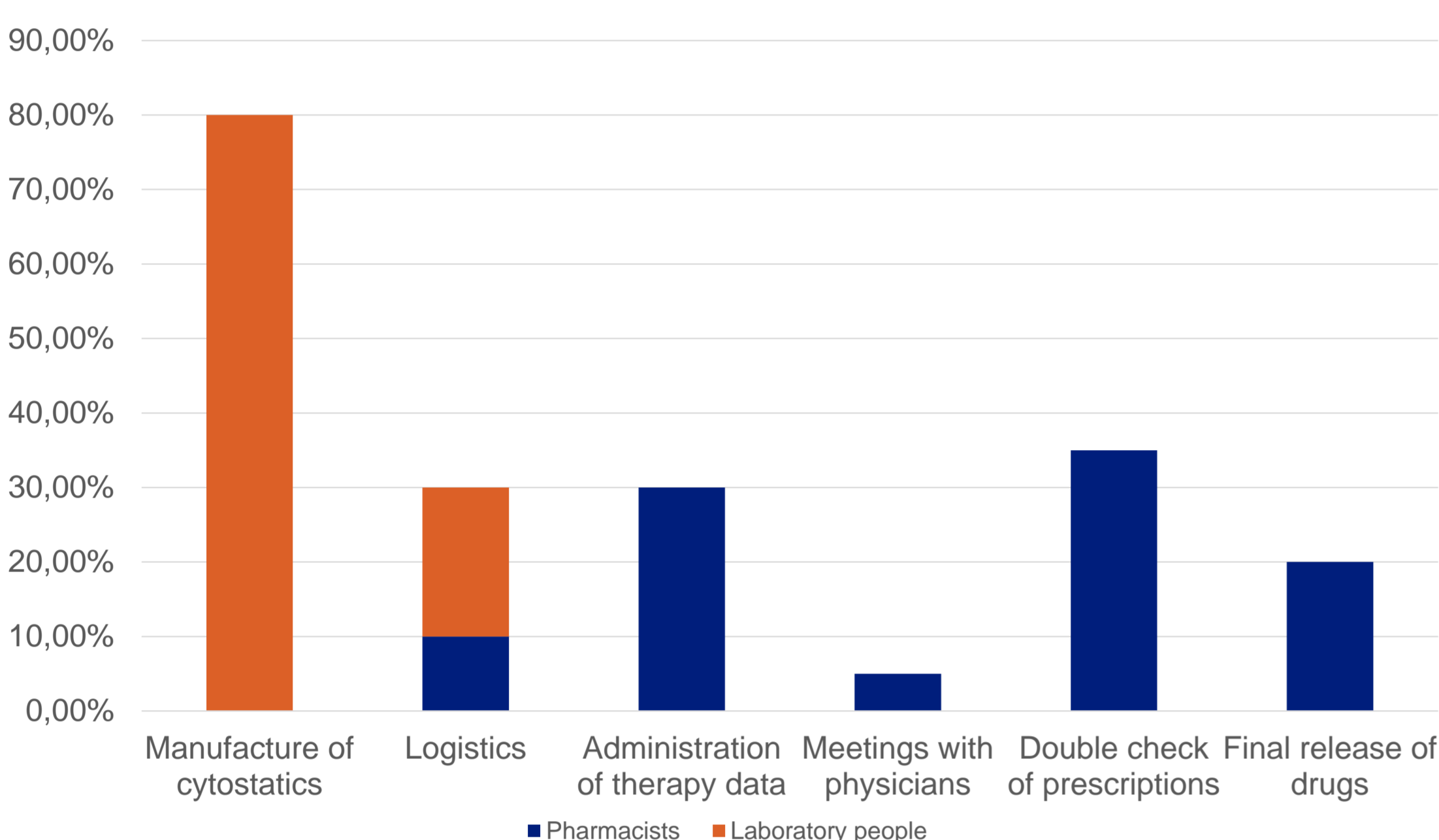


Fig.1: Activities of pharmacists and laboratory people in manufacturing ready-to-use cytostatic drugs

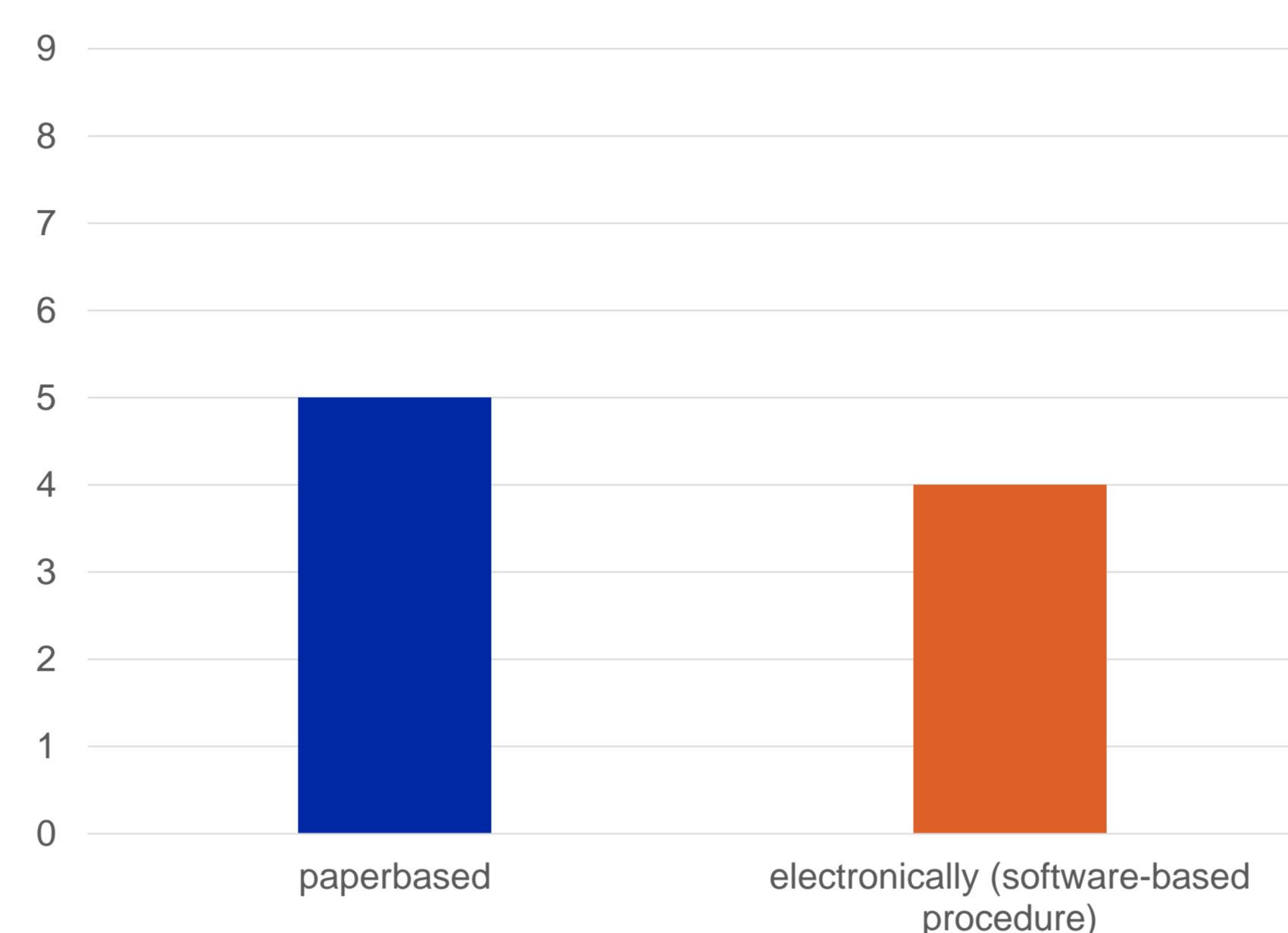


Fig.2: Comparison between paperbased and electronic prescription

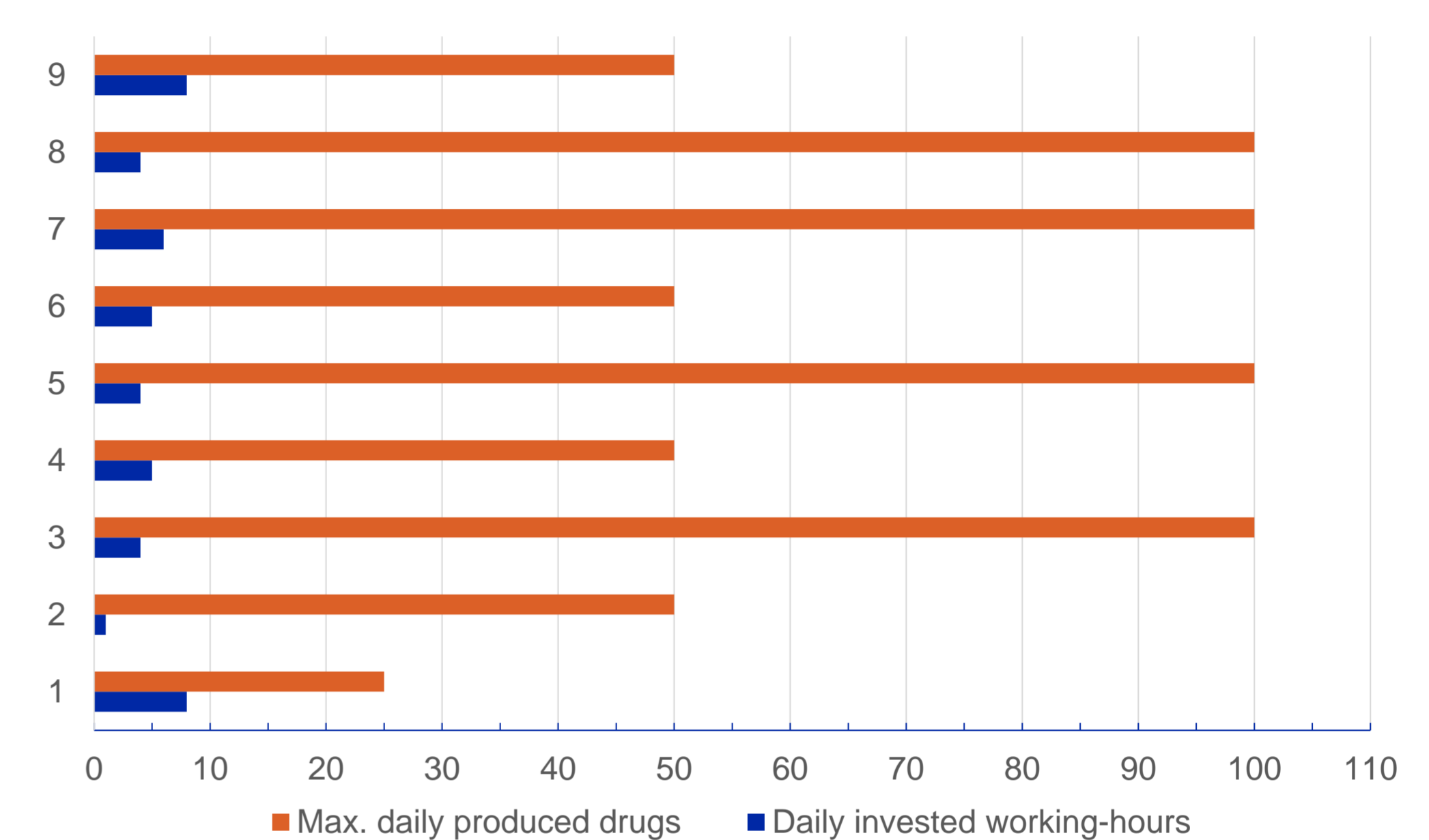


Fig.3: Daily invested working hours of pharmacists in relation to number of daily produced ready-to-use drugs

## 3. Results and discussion

- All of the 9 hospitals, 3 university hospitals, that took part in the survey, manufacture ready-to-use oncologicals mainly by gravimetric procedure
- Manufacturing of medications is performed by laboratory employees, also part of logistic activities (headcount: 4-5 people)
- Pharmacists are deeply involved in logistic processes as ordering new drugs, checking the material stock (headcount: 1 full time pharmacist)
- The prescriptions are validated by pharmacists. They also take care for all therapy data and release therapy plans together with physicians
- All produced medications are released by pharmacists
- Additional staff is used by 3 hospitals, to help hand in the material into the production area, as to enhance and increase capacities in the manufacturing process

Most hospitals in Switzerland have fully automated processes and mainly use shop floor systems, for example the software BD CATO® to manage the complete workflow of cytotoxic drugs. This includes the prescription, manufacturing and the application to the patient. The shop floor system (e.g. BD CATO software) can also be used for electronic prescriptions. But many physicians prefer a central prescribing process for all drugs in an hospital and in most cases interfaces do not allow fully data exchange to the shop floor system used in the pharmacy. This is the reason that 56 % of the hospitals rely on paperbased prescription.



Fig.4: Manufacturing Pharmacist in the Pharmacy releasing medications



Fig.5: Clinical pharmacist working on the ward directly on the patient

## Conclusion

Currently, the pharmacists responsible for the manufacturing of ready-to-use cytotoxic drugs, do not perform additional clinical-pharmaceutical activities on the ward. Contact to oncology patients or directs patients counselling are not performed by this group. They have to invest their full resources into the manufacturing and logistical processes of cytostatics to avoid long waiting time especially for outpatients. Even more hospitals integrate the production unit into the oncological ward to bring pharmaceutical production experts and the ward staff closer. This enhances the communication between the pharmacist, physician and care staff. This enables the possibility for pharmacists to combine manufacturing and clinical pharmaceutical care activities

Automatic production processes and a strong validation concept can also relieve the pharmacist from their basic manufacturing activities and give them the possibility to invest more of their capacity directly into the clinical pharmaceutical care on the ward and to improve oncologic therapy for patients. To achieve this goal some obstacles must be overcome as the conviction of health authorities to accept an automated release of drugs manufactured by validated automation processes without inclusion of pharmacists.

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## References

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