



(bio)Pharma Ireland high level seminar

THE FUTURE OF (BIO)PHARMACEUTICAL MANUFACTURING

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Improved pharmaceutical manufacturing: supporting access to medicines

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Medicine shortages are common:

80% of the Finnish pharmacies have shortages daily or almost daily

Medicines in short supply are commonly used medicines:

e.g. nervous system (30.8%), cardiovascular system (17.5%) and alimentary track (10.1%)

Medicine shortages are more often supply-related than demand-related (e.g.):

Logistics and distribution issues:

Small stock size

Manufacturing issues:

Long or complex production chain

Raw material shortage

Production issues

Capacity issues

Quality and process issues



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“Medicine shortages may cause several issues related patient care and patient safety, such as medication errors and inefficiency in medical care. Furthermore, patients may suffer from delays or may not receive the recommended treatment at all. “

“Shortages may also add to the workload of physicians and pharmacists and increase the cost of medical care.”

To support access to medicines, that are more complicated and sophisticated, more personalized in near future, we need ‘Improved pharmaceutical manufacturing’, meaning:

- **Leaner (‘closer to patient’) production chains**
- **Filling the technology and knowledge gaps in ‘pharmaceutical manufacturing sciences’**
- **Up-to-date education and training in ‘pharmaceutical manufacturing sciences’**

i.e. focussed funding for the JOB!

references:

Heiskanen K, Ahonen R, Karttunen P, Kanerva R, Timonen J: Medicine shortages – A study of community pharmacies in Finland. Health Policy 119(2): 232–238, 2015

Heiskanen K, Ahonen R, Karttunen P, Kanerva R, Timonen J: The reasons behind medicine shortages from the perspective of pharmaceutical companies and pharmaceutical wholesalers in Finland, Plos One, submitted



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Thank you!

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