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What was done?

- **Multidisciplinary development** of a standardised neonatal parenteral nutrition (PN)
- **Manufacturing** of the ready-to-use double-chamber infusion bag by an industrial partner.
- **Implementation as “standard-of-care”** for newborn term and preterm infants requiring nutritional treatment within their first days of life



Why was it done?

Composed of about 14 different ingredients, **PN is essential** for a good cerebral and neurologic development as well as a postnatal weight gain

Medication errors are often related to PN including prescription, transcription, preparation and administration

→ **PN is a complex and high-risk fabrication**

→ **ME can result in growth retardation, developmental disturbances and infections**

 **Improvement of the security and quality of their nutritional treatment**

 **Reduction of ME having an impact on vulnerable newborns**

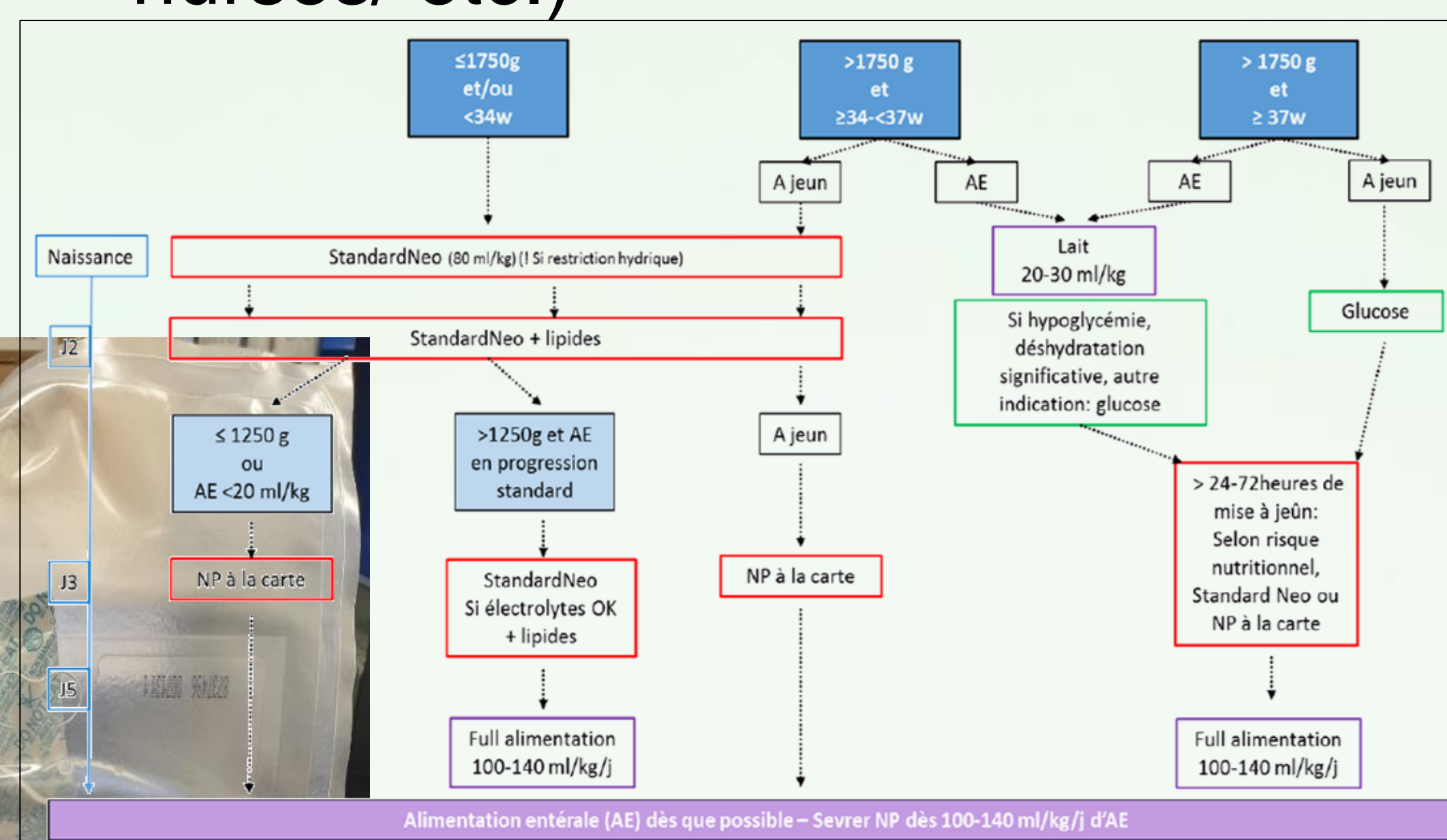
Interdisciplinary development



In accordance with applicable guidelines



Decision guidelines and training for neonatal personnel (physicians/nurses/ etc.)



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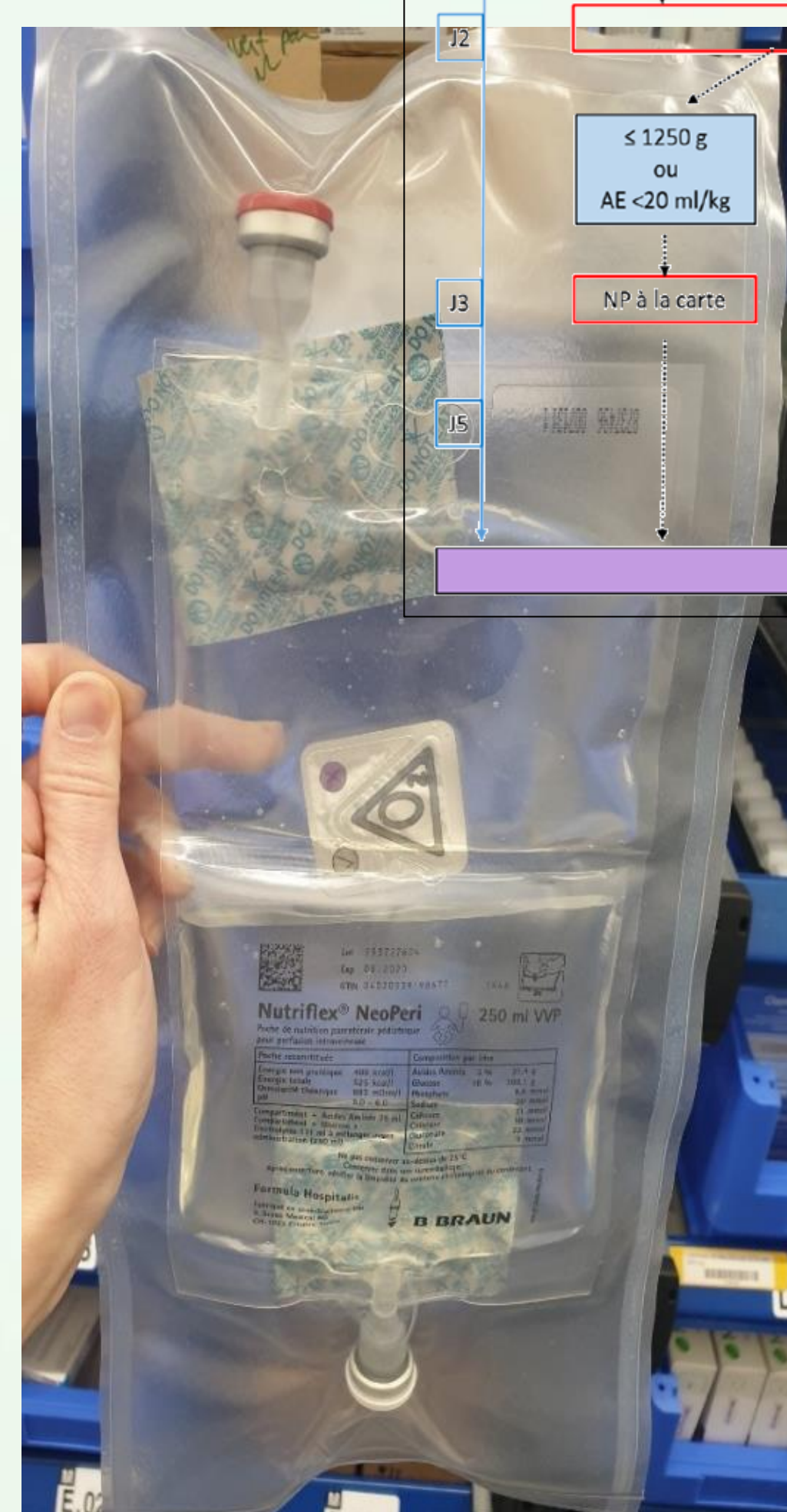
Standard of Care on neonatal ward



Including **standard PN solution** and **standard procedures**



How was it done?



Industrially manufactured **24/7 ready-to-use** dual chamber PN solution

What has been achieved?

80%

reduction of on-ward PN preparations by nurses

1/3

of individual PN prepared at the hospital's pharmacy replaced

ME

reduced and patient safety raised by standardised PN management

What comes next? ~ Development of further standardised PN for newborn infants → **Safe nutritional treatment.**
 ~ Expansion to other Swiss hospitals → **National standardisation of nutritional treatment for neonates.**
 ~ Prohibition of on-ward PN preparations and takeover at the pharmacy → **Prevention of undetectable ME.**

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No conflict of interest to disclaim

