



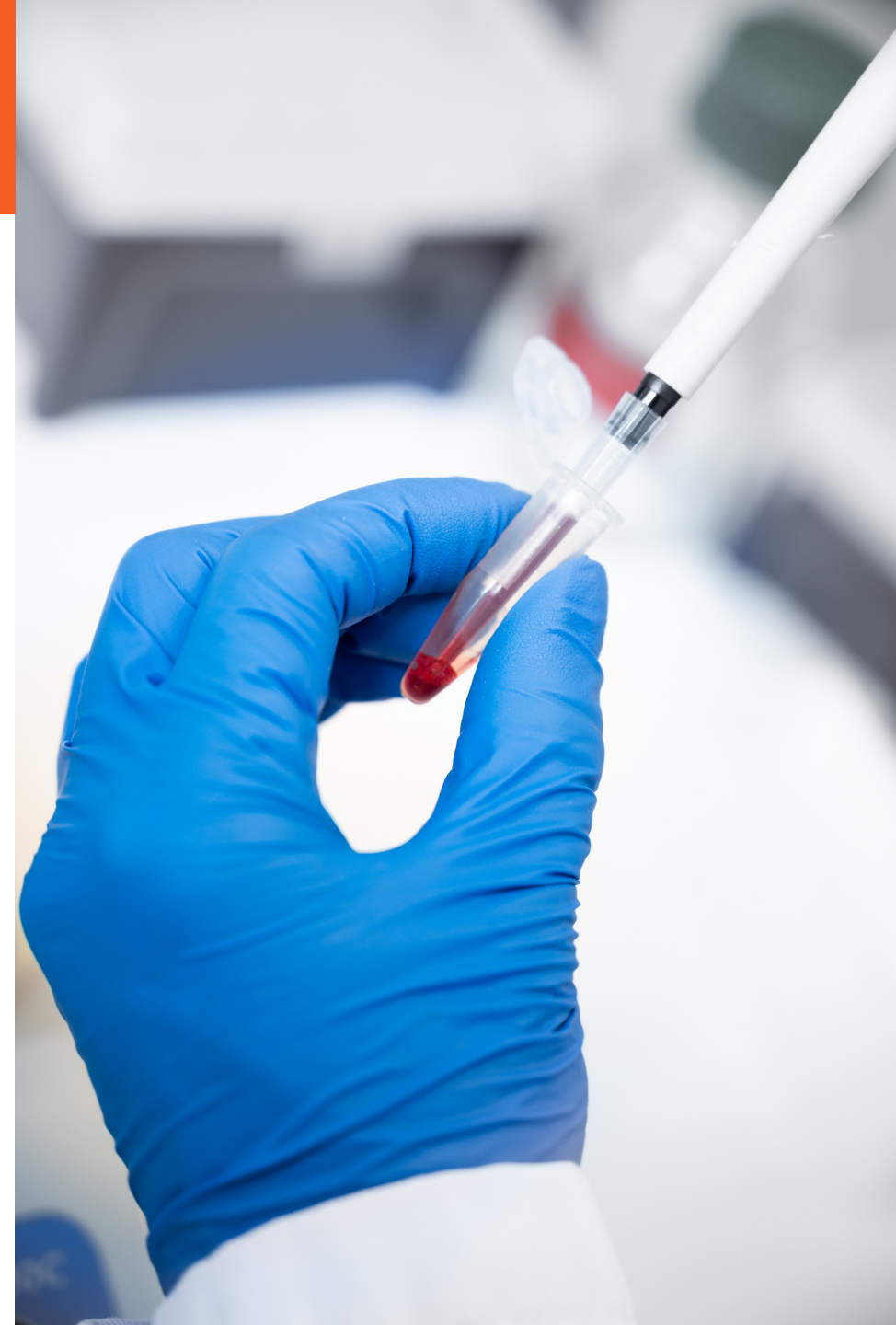
NADMED

# CASE STUDY

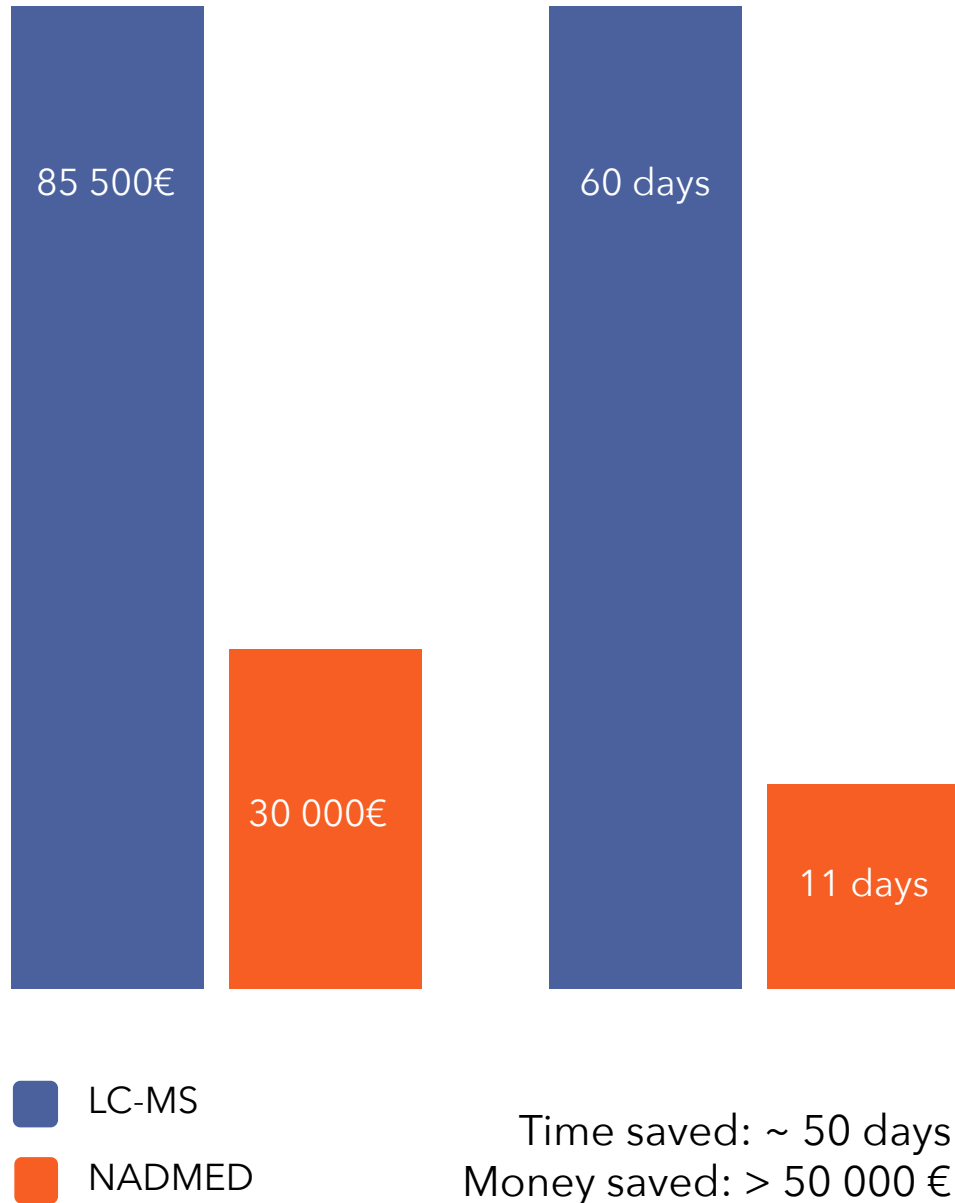
COMPARISON BETWEEN  
MASS-SPECTROMETER & NADMED

# NADMED answers to the demand

- NAD measurement has been performed using mass spectrometry or colorimetric kits. Each method involves a set of characteristic problems.
- Using a mass spectrometer is expensive and time-consuming, while the colorimetric kits on the market are commonly inaccurate and unreliable and cannot measure blood samples.
- The NADMED method solves these problems providing a fast, accurate, and reliable method for the cost-effective measurement of all forms of NADs and glutathiones from all biological sample types. No other method can do this.
- Due to its accuracy and reliability, the Q-NADMED Blood Kit is CE-marked for measuring NAD<sup>+</sup> and/or NADH from a small blood sample for a range of clinical purposes. It is the only kit for NAD measurement to have received CE marking.



## COMPARISON BETWEEN MASS SPECTROMETER & NADMED



In this example a study requires three blood samples from each study subject measured three weeks apart and the cohort size being 300. The study's requirement adds up to a total of 900 samples.

Using LC-MS, such a study would take at least 60 working days, whereas with NADMED the same measurements could be performed in 11 days by one person. In fact, mass spectrometers typically requires two people to run the equipment, meaning 120 workdays in total for this hypothetical study.

The full cost per sample using an MS is over 95€, therefore the total cost for measuring NAD with LC-MS in this case study, would be over 85 500€.

If the study would be performed using NADMED kits, the total cost would be approximately 30 000€ and take only nine workdays.

CUSTOMER'S IN-HOUSE LAB	LC-MS	NADMED	NOTES
Equipment purchase costs	> 500 k€	< 20 k€	NADMED requires equipment already in use at most clinical labs
Throughput (samples/day)	~15 samples / 2 persons / day	> 80 samples / 1 person / day	
Minimum turn-around time	19 h	3 h	In practice, mass spec results may take several weeks
Material and service costs per sample	> 20 €	< 30 €	
Capital cost / sample	> 40 €	~0	Assuming 80% capacity utilization with 5% IRR and 5-year depreciation
Labor cost / sample	> 35 €	< 5 €	
Total cost /sample	> 65-95 €	< 30 €	Note: typical 3 <sup>rd</sup> party price for LC-MS measurement is 200-300 €

Other kits on the market are not compared here because of their inability to measure the accessible sample type, blood.