



# Costs and Quality of Life in Patients with Chronic Liver Diseases: the “COME” Study Results

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## *Background and Aims:*

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- The burden of Chronic Liver Diseases (CHDs) is little known.
- Information on the **Burden of CHDs**, which includes:
  - *Impaired level of patients' health and wellbeing,*
  - *Direct medical and non medical costs spent by patients and third party payer,*
  - *Loss of productivity due to absenteeism and reduced working efficiency***is still currently little known**
- Most of pharma-economic analysis are base solely on direct medical costs (*Drugs and/ or Hospital Charges*)

## *Background and Aims:*

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We aimed to assess the socio-economic burden of CHDs in Italy

- *Direct Costs* (medical and non medical)
- *Loss of productivity* (days of work/ study/ everyday activities)
- *Health Related Quality of Life* (HRQoL)

## Materials and Methods

<b>Type of study</b>	Naturalistic, multicentre, longitudinal Cost of Illness study, adopting the societal point of view
<b>Patients and setting</b>	Any CHD adult patient (>18 years) consecutively accessing a Gastroenterology Unit (Ospedali Riuniti, Bergamo and Ospedale Policlinico Federico II, Napoli)
<b>Time horizon</b>	6 months before the enrollment in the study
<b>Data</b>	<ul style="list-style-type: none"><li>• Clinical, Health Related Quality of Life (EQ-5D),</li><li>• Resource consumption (<b>direct costs</b>)<ul style="list-style-type: none"><li>• <u>Medical</u>: <i>(related to hepatic disease) conventional drug and unconventional treatment (e.g., homeopathy, herbal medicines, vitamins, etc), hospitalization for reasons attributable to hepatic condition, outpatient medical visits and diagnostic examinations</i></li><li>• <u>Non Medical</u>: <i>formal (paid) assistance, travelling and/ or accommodation</i></li></ul></li><li>• Loss of productivity (<b>indirect costs</b>)</li><li>• Results are expressed as <b>€/patient-month</b> (direct costs) and <b>days/patient-month</b> (loss of productivity).</li><li>• Patients' HRQoL was assessed with the EQ-5D questionnaire and is reported as percentage of patients with problems</li></ul>

*the "COME" Study Results*

**1,088** patients enrolled

62.0% male, age range 19-90 (median=59,5)

**Chronic Hepatitis**

652 (60,0%)

**HCV** 53,1%      Other 46,9%

**HBV** 33,9%      **Other** 13,0%

**Cirrhosis**

222 (20,4%)

**HCV** 52,3%      **HBV** 19,0%      **Other** 28,7%

**HCC**

85 (7,8%)

**HCV** 64,6%      **HBV** 14,6%      **Other** 20,8%

**OLT**

129 (11,9%)

**HCV** 26,4%      **HBV** 20,9%      **Other** 52,8%

**HCV: 50,6%**

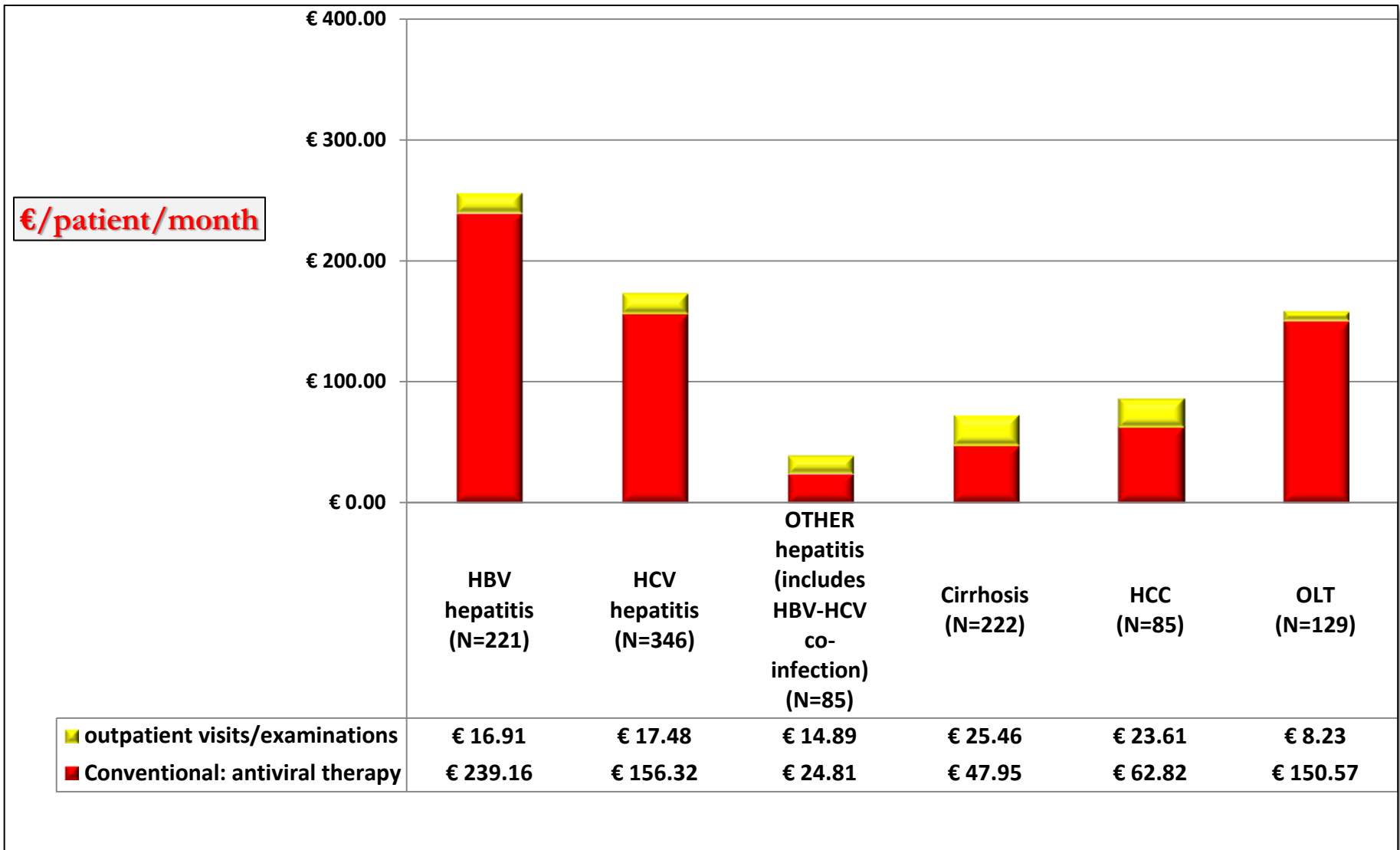
**HBV: 27,9%**

**Others: 21,5%**

Co-inf: 1,3%

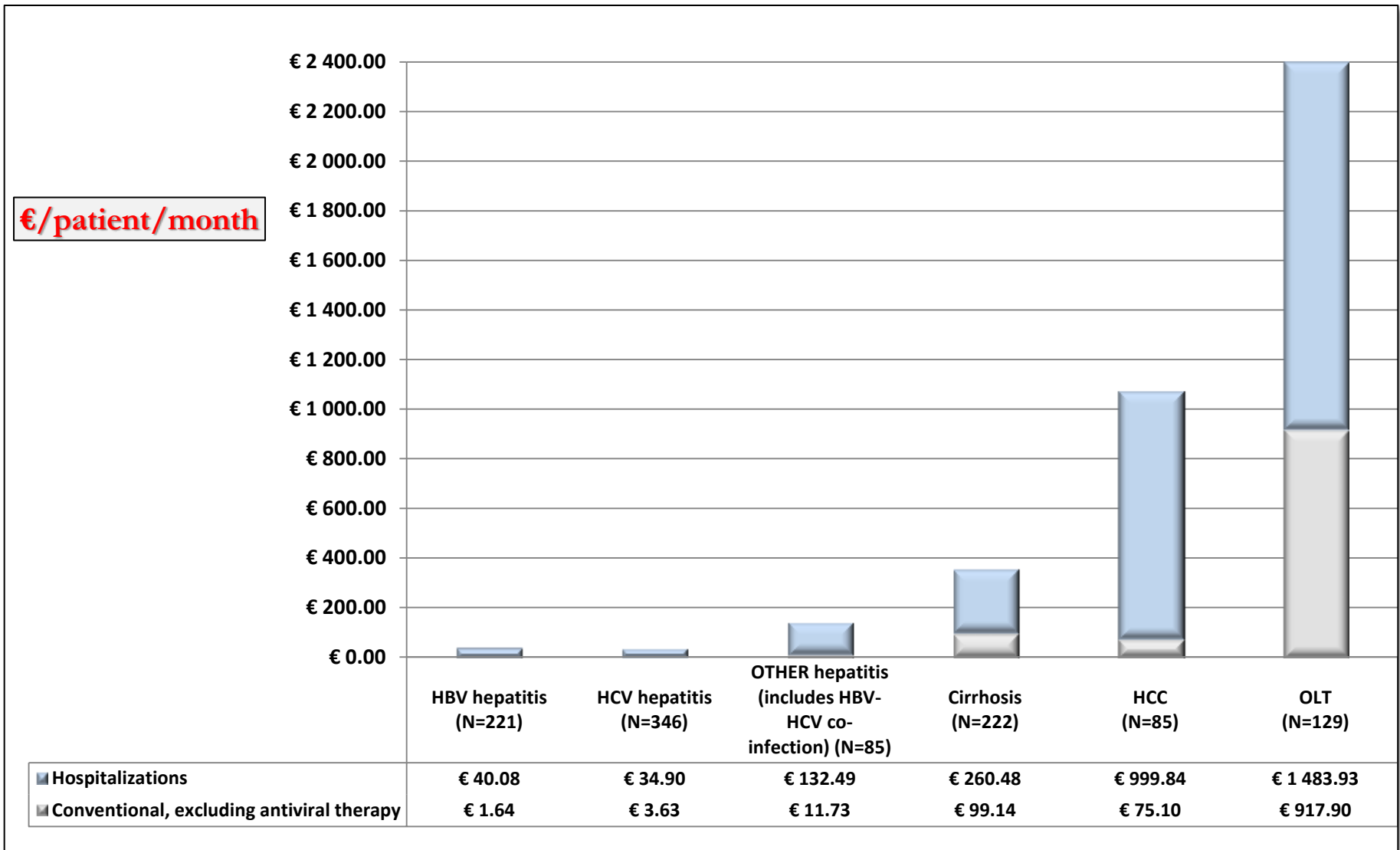
# Results

## Direct costs according to main condition



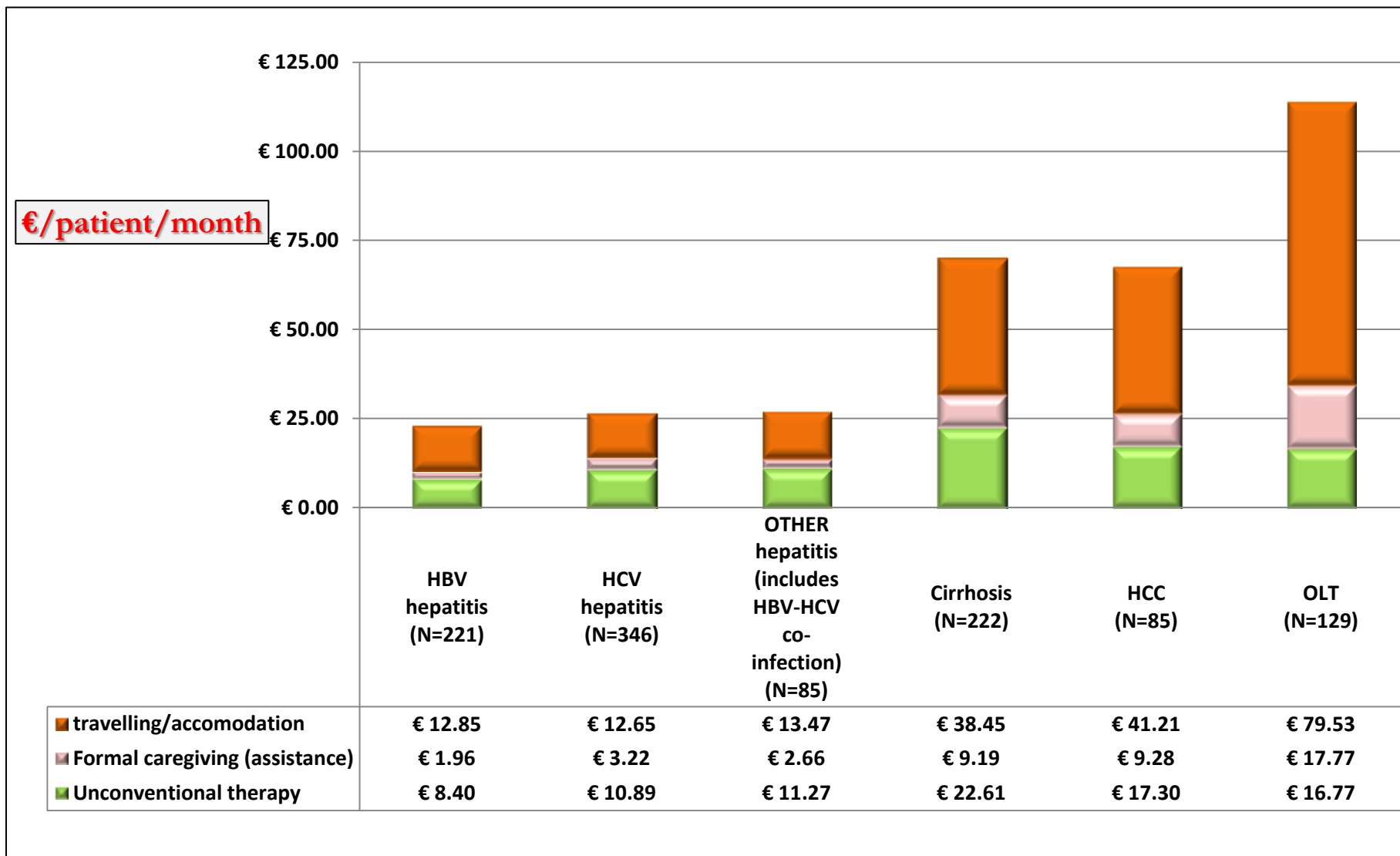
# Results

## Direct costs according to main condition



# Results

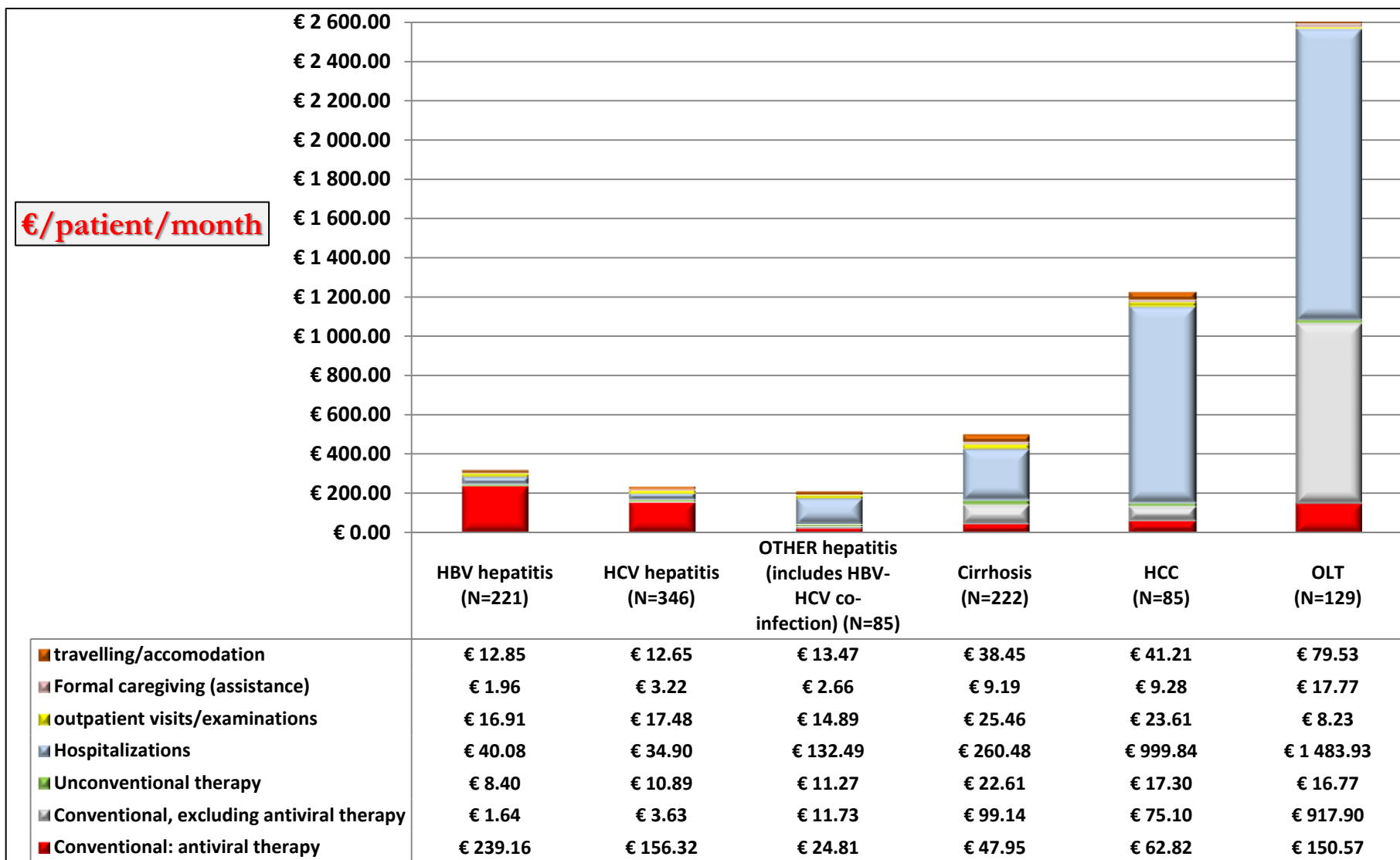
## Direct costs according to main condition



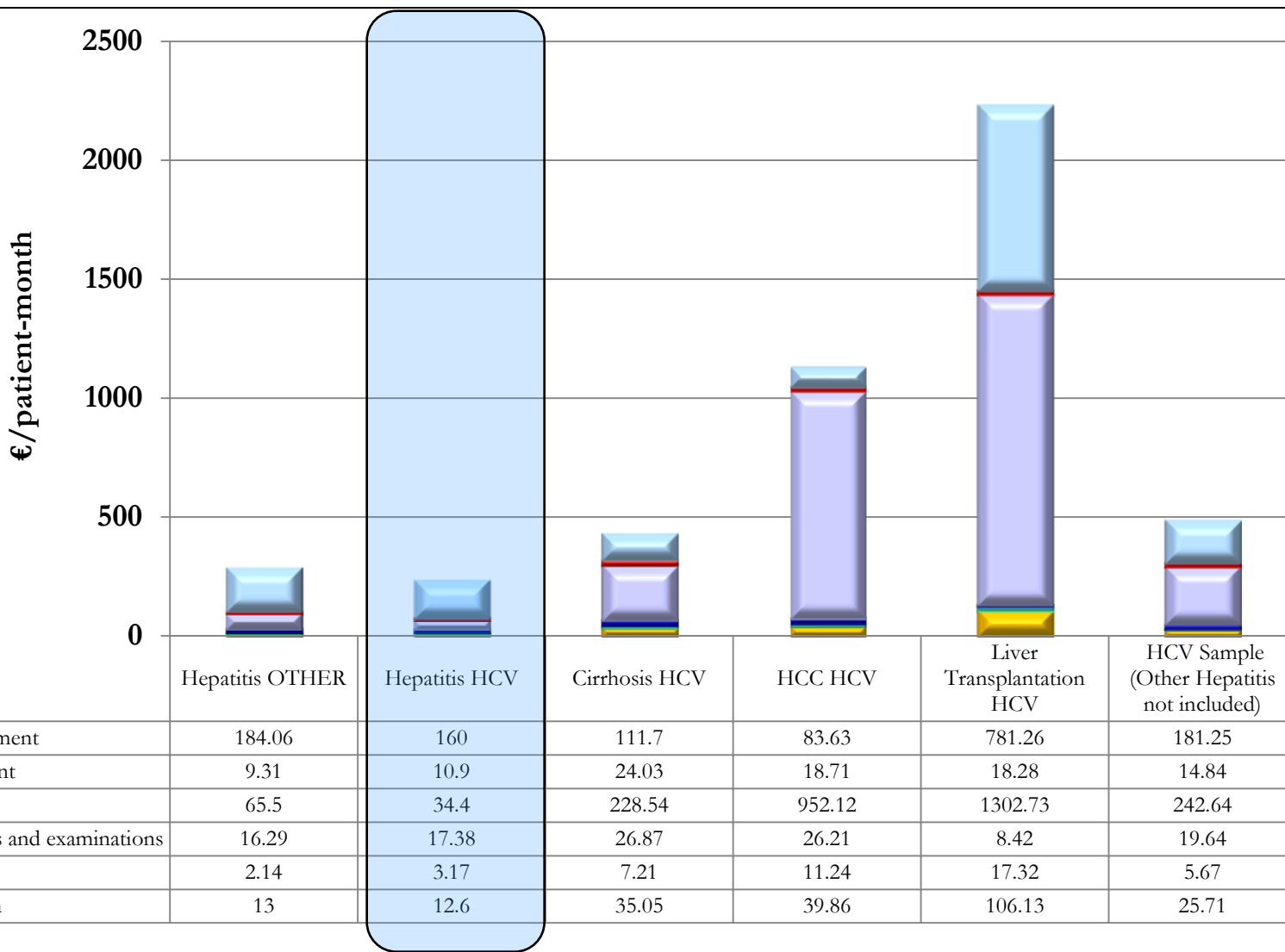


# Results

## Direct costs according to main condition



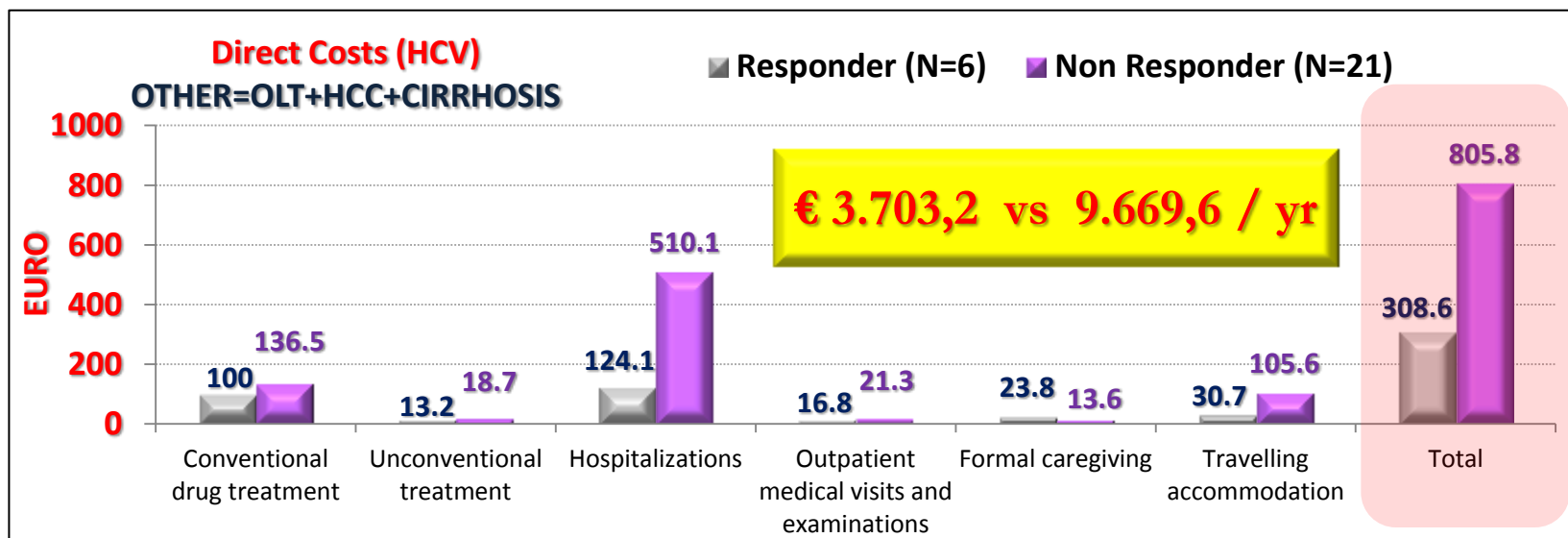
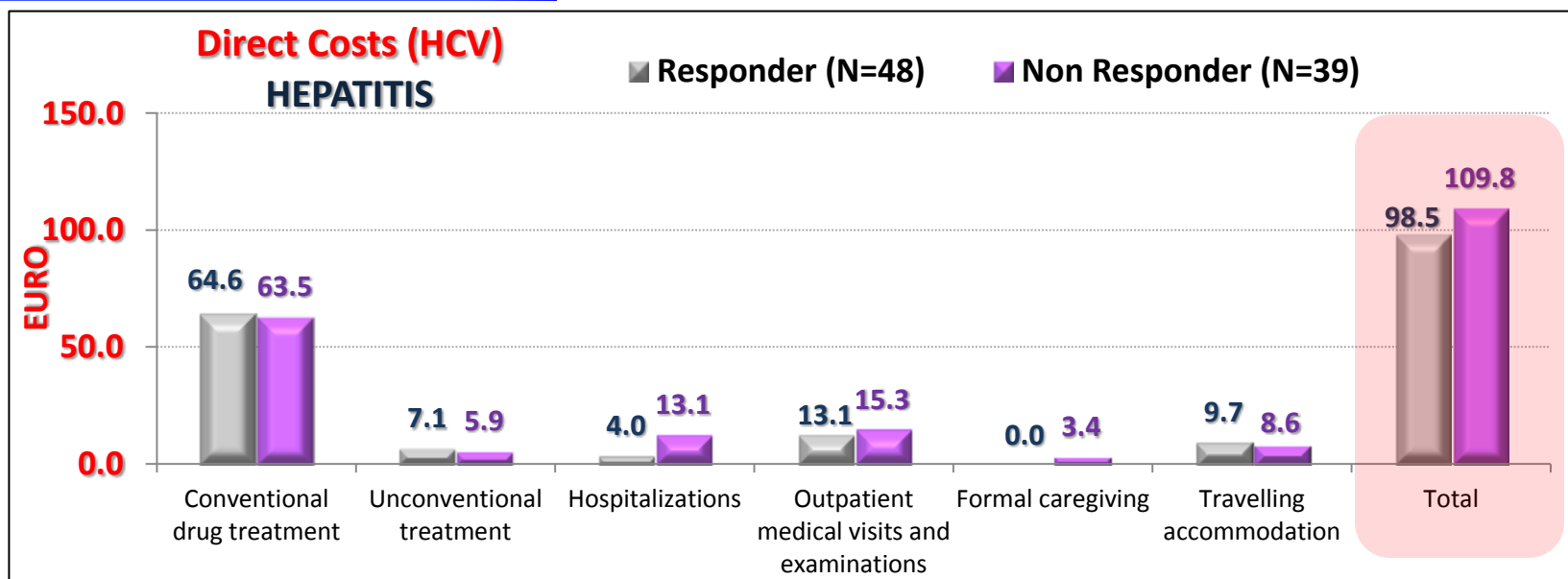
# HCV: Total costs



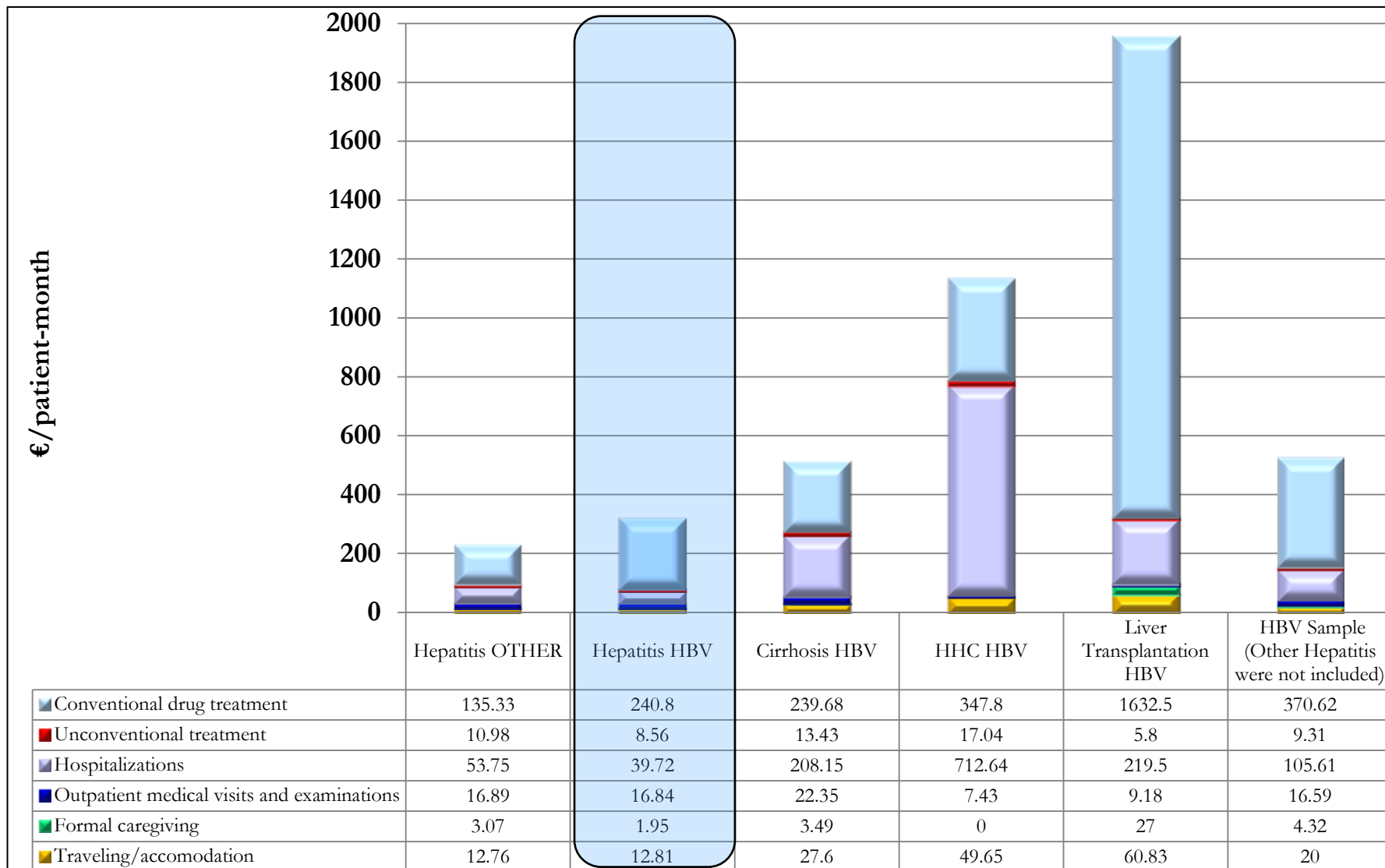
# Results

## Direct costs: Responder vs Non Responder to AV treatment

€ / month

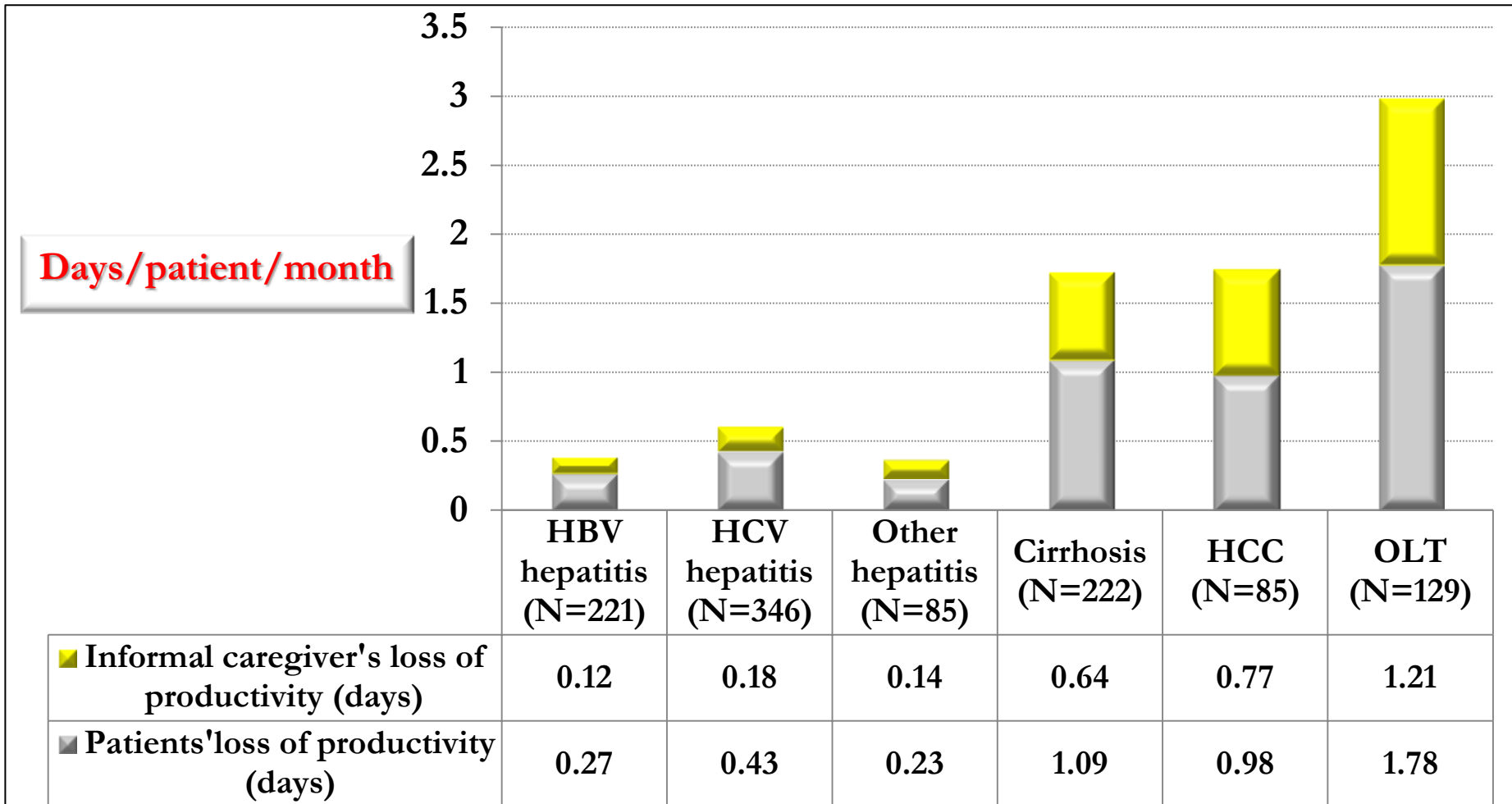


# HBV: Total costs



# Results

## Indirect Costs according with Patient condition *Loss of productivity\**

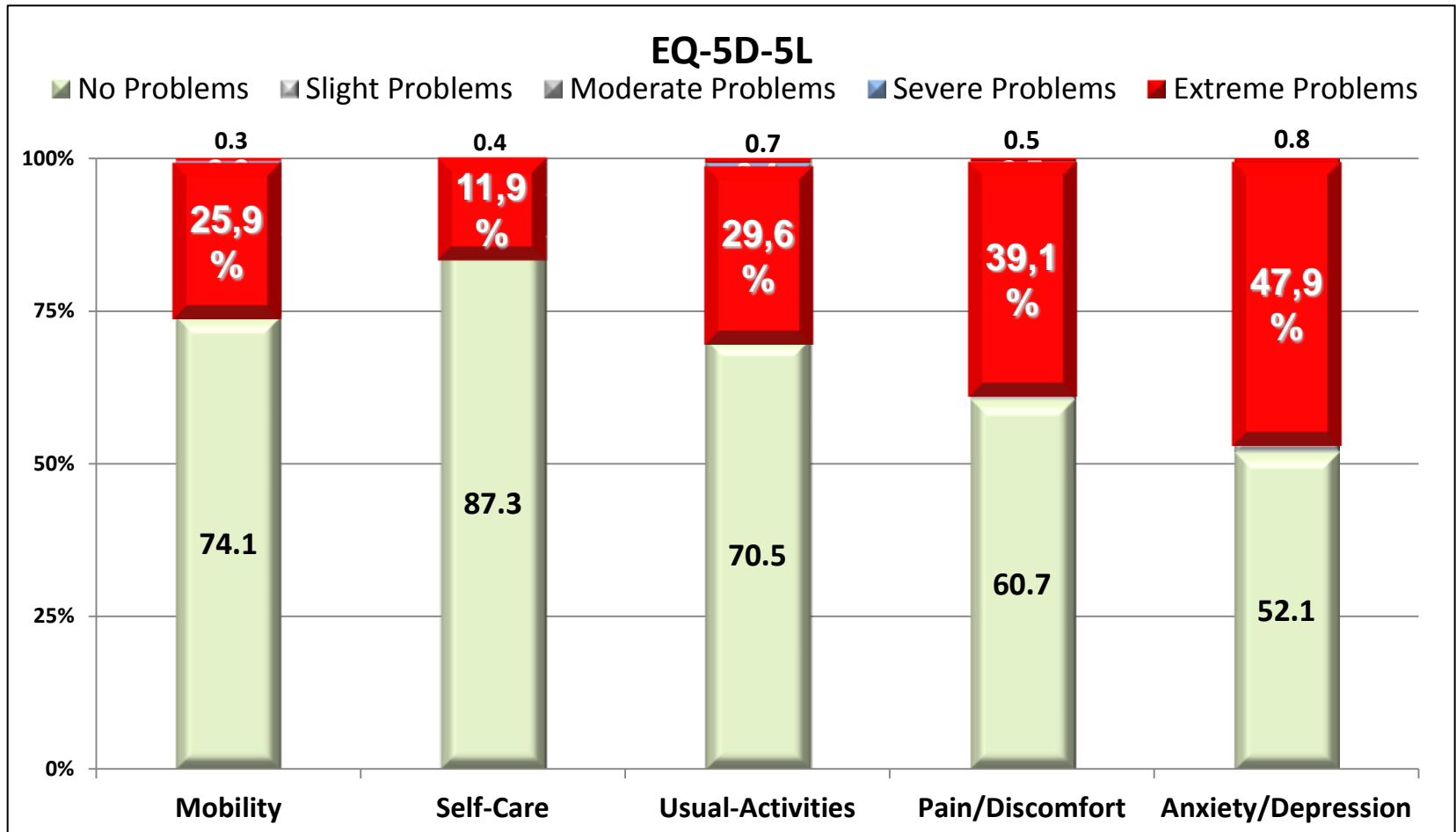


\* It is reported as mean days lost from work/ doing everyday activities per patient-month.

Loss of productivity includes both paid work and unpaid activities, e.g., from students and housewives

# Results

## HRQoL quality of life



## *Conclusions*

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*This study provides with an exhaustive picture of the burden of CHDs in Italy, considering the point of view of:*

- **The Third party payer** (*NHS, for direct medical costs*)
- **Patients** (*HRQoL, productivity loss and some direct costs*)
- **Families** (*loss of productivity*)

## *Conclusions*

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The more advanced the Liver disease, the higher are the **Global Costs**, increasing from a **mean** of

**300,00 €**/month/pt for CH,

up to

**550,00 €** /month/pt in PNC patients

**1.300,00 €** /month/ pt in HCC patients

**1.450,00 €** /month/pt in OLT patients



## *Conclusions*

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- CHD generates **High Costs** to the Healthcare System
- The use of effective treatments in the Early Stages of Liver Diseases appears necessary when aiming at:
  - ✓ Reducing worsening of Patient' Health
  - ✓ Reducing both Direct and Indirect Costs