Swedish Consensus Group
2011: Treatment of HCV in Adults and Children

Martin Lagging
Outline

- Guidelines from 2011
- Current therapy in Sweden
- New guidelines likely in 2014
Swedish Guidelines from 2011

Published in
Scandinavian Journal of Infectious Diseases 2012
Patients that are recommended treatment

- Acute HCV infection:
  - Symptomatic: treat if not spontaneously resolved within 3 months
  - Asymptomatic: treat immediately
Patients that are recommended treatment

- Acute HCV infection:
  - Symptomatic: treat if not spontaneously resolved within 3 months
  - Asymptomatic: treat immediately

- Chronic HCV genotype 1: fibrosis stage 3-4 (FibroScan or biopsy)
Patients that are recommended treatment

- Acute HCV infection:
  - Symptomatic: treat if not spontaneously resolved within 3 months
  - Asymptomatic: treat immediately

- Chronic HCV genotype 1: fibrosis stage 3-4 (FibroScan or biopsy)

- Chronic HCV genotype 2/3: wider indications
Patients that are recommended treatment

- **Acute HCV infection:**
  - Symptomatic: treat if not spontaneously resolved within 3 months
  - Asymptomatic: treat immediately

- **Chronic HCV genotype 1:** fibrosis stage 3-4 (FibroScan or biopsy)

- **Chronic HCV genotype 2/3:** wider indications

- **Goal:** To prevent HCV complications, e.g. HCC and decompensated cirrhosis
Treatment HCV genotype 1

- Peg-Interferon + ribavirin + protease inhibitor (PI)
  - Telaprevir first-line choice because of shorter exposure to PI
Treatment HCV genotype 1

- Peg-Interferon + ribavirin + protease inhibitor (PI)
  - Telaprevir first-line choice because of shorter exposure to PI

- Duration:
  - **24-28 weeks** if HCV RNA undetectable 4 weeks after addition of PI
  - **48 weeks** if HCV RNA detectable 4 weeks or later timepoint after addition of PI

- If cirrhosis, 48 weeks duration
Treatment HCV genotype 2/3

- Peg-Interferon + ribavirin ≥ 11 mg/kg/day
Treatment HCV genotype 2/3

- Peg-Interferon + ribavirin ≥ 11 mg/kg/day

- Duration:
  - 12-16 weeks if:
    - HCV RNA < 1000 IU/mL day 7
    - or RVR + favorable factors (age <40, mild fibrosis, or low viral load)
  - 24 weeks if RVR + unfavorable factors
  - 36-48 weeks if HCV RNA >50 IU/mL week 4 or detectable week 12
  - 48 weeks if cirrhosis
HCV Treatment in Children

- Same as in adults
- **Exception:** No reports on PI use in this population
Current therapy in Sweden
Current HCV Therapy

- Only cirrhotic patients are currently initiating therapy
- Considerable warehousing of patients
New Guidelines Likely in 2014
1. Binding and internalisation
2. Release and uncoating
3. IRES mediated translation
4. Polyprotein processing
5. Membraneous web formation
6. Replication
7. Assembly and release

HCV and potential therapy
New DAAs likely to be approved 2013-2014 in EU

- Sofosbuvir: Polymerase Inhibitor (Gilead)
- Simeprevir: 2\textsuperscript{nd} generation Protease Inhibitor (Janssen/Medivir)
Possible Interferon-free HCV Therapy from 2014

- **Genotype 1**
  - Simeprevir + Sofosbuvir + (ribavirin) 12 weeks
Possible Interferon-free HCV Therapy from 2014

- Genotype 1
  - Simeprevir + Sofosbuvir + (ribavirin) 12 weeks

- Genotype 2:
  - Non-cirrhotics: Sofosbuvir + ribavirin 12 weeks
  - Cirrhotics: Sofosbuvir + ribavirin ≥16 weeks
Possible Interferon-free HCV Therapy from 2014

- **Genotype 1**
  - Simeprevir + Sofosbuvir + (ribavirin) 12 weeks

- **Genotype 2:**
  - Non-cirrhotics: Sofosbuvir + ribavirin 12 weeks
  - Cirrhotics: Sofosbuvir + ribavirin ≥16 weeks

- **Genotype 3:**
  - Sofosbuvir + ribavirin 24 weeks (lower SVR than genotype 1 or 2)
  - The new "**Difficult-to-Cure**" genotype
Possible Interferon-free HCV Therapy from 2015-16

- Abbvie combination
- BMS combination including Daclatasvir (NS5a inhibitor)
- Gilead combination
- MSD combination
- Janssen combination?
Cost

- If low:
  - Broad use likely
  - Eradication programs possible

- If high: Only fibrosis stage 3-4 treated?
New Issues

- **Cost**
  - If low:
    - Broad use likely
    - Eradication programs possible
  - If high: Only fibrosis stage 3-4 treated?

- **Adherence**

- **Side-effects no longer an issue**
Please Do Not Forget

- All patents expire
  - DAA patents expire 2025-2029

- Eradication programs eventually will be possible with regards to cost