# HCV treatment following HCC diagnosis

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# Objectives

- Review recommendations around who should be treated for HCV
- Discuss the optimal time for initiating DAA treatment following HCC treatment
- Analyze the benefits of treatment vs non treatment

# AASLD recommendations on who to treat

| Recommendation for When and in Whom to Initiate Treatment | |
|---|---|
| RECOMMENDED | RATING |
| Treatment is recommended for all patients with acute or chronic HCV infection, except those with a short life expectancy that cannot be remediated by HCV therapy, liver transplantation, or another directed therapy. Patients with a short life expectancy owing to liver disease should be managed in consultation with an expert. | I, A |

# Which patients with HCC should be treated?

- **Potentially curative treatment options**
  - Resection or single lesions undergoing ablation
- **Transplant candidates**
- **What about those with:**
  - Multiple lesions
  - Undergoing TACE but not transplant candidates
  - Receiving systemic therapies
  - Metastatic disease
  - Decompensated cirrhosis

# Definition of cure for HCC

- HCC free 5 years after curative treatment

# Odds of Cure following resection

- Meta-analysis by Rveron-Thorton RF etal.
- Reviewed 110 studies and 82,392 participants
  - 1 year survival 89% and 5 year survival 56%
  - Recurrence free survival at 1 year 71% and 35% at 5 years

# When should you start treatment?

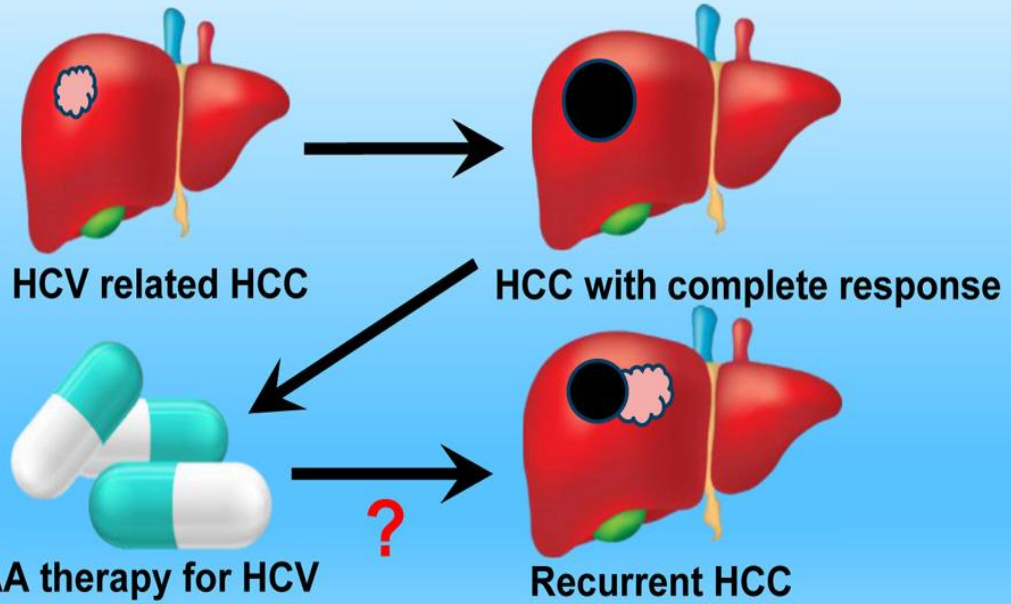
- HCC recurrence rates are high (15-20% annually)
  - Is this recurrence in part due to active viremia?
- Does treating HCV early decrease the risk for recurrence?
- Several studies were published following the introduction of DAA's that raised concern about early HCC recurrence after DAA therapy.

# Does DAA treatment result in early recurrence?

- **Reig et al**
  - 58 patients with HCV and prior HCC
    - 5.7 month follow up – 3 had died and 16 had developed recurrence (27.6%)
- **Pei-Chien Tsai et al**
  - Recurrence was higher when treatment was starting with in 4 months
    - 54.6% vs 21.3%
- **Singal et al**
  - 793 patients with HCV associated HCC in North America
    - 304 (38.3%) received DAA and 489 (61.7%) were untreated
    - Recurrence – 41.2% in treated (128 with early recurrence in 52) and 58.9 % in untreated (288 with early recurrence in 227).

# Direct-Acting Antiviral Therapy is not Associated with HCC Recurrence: A Multicenter North American Cohort Study

**Conflicting data on whether direct acting antiviral hepatitis C treatment impacts the risk of hepatocellular carcinoma recurrence**




**Aim: Do DAAs impact the risk of HCC recurrence?**

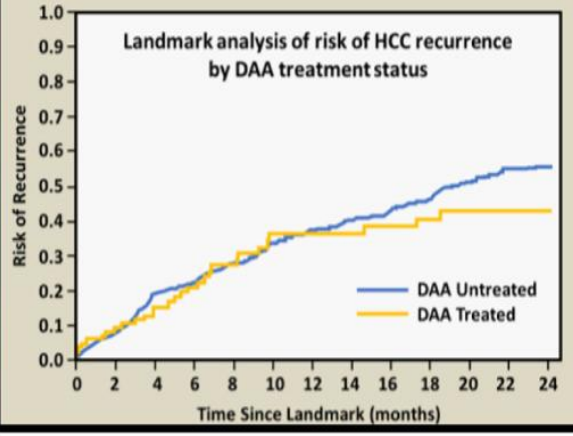
**Methods:**

31 centers in North America including patients with HCV-related HCC with complete radiographic response

**Results:**

**304** Treated with DAAs

**489** Treatment naïve HCV




DAA therapy has no impact on:

- Overall HCC recurrence (aHR: 0.90 95% CI: 0.70-1.16)
- Early HCC recurrence (aHR: 0.96 95% CI: 0.70-1.34)

Singal AG et al. *Gastroenterology*. 2019

Gastroenterology

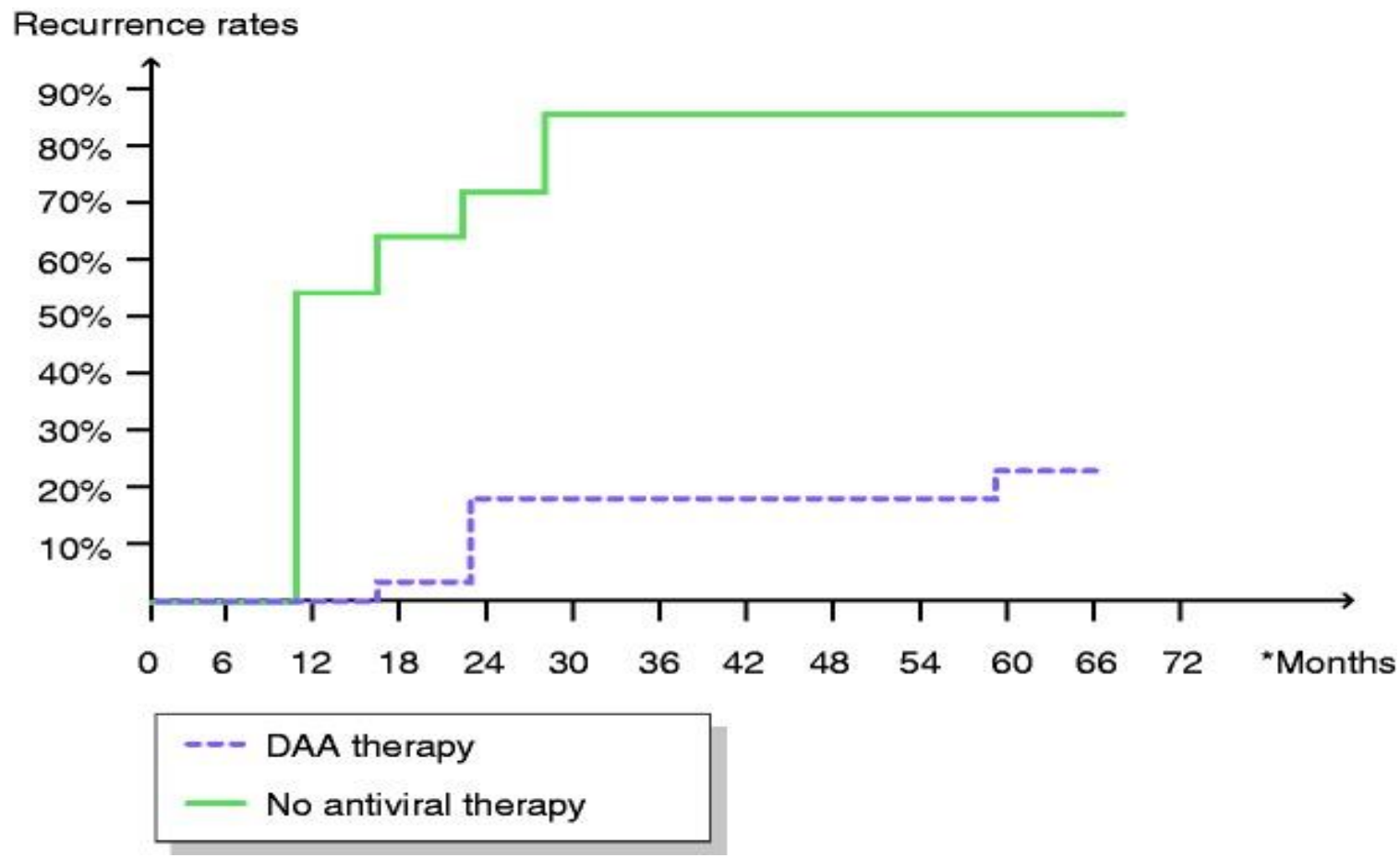
# Does treatment prevent HCC?

- **Conti et al**
- **344 cirrhotic patients**
  - 59 with previous HCC
- **Followed for 24 weeks**
  - 26 patients developed HCC
  - 17 of the 59 with prior HCC and 9 of the 285 without prior HCC
- **Risk factors:** more severe fibrosis, CP-B, low plts and previous HCC
  - Of those with previous HCC: younger age and more severe fibrosis
- **Conclusion:** DAA treatment did not seem to reduce occurrence of HCC.

# Decrease risk of recurrence?

- **Torres Et al**
  - No patients (N 20) wo received curative procedures followed by DAA showed recurrent HCC at median follow up of 12 months (range 4-60 months)
- **Ikeda et al**
  - 177 patients received DAA after curative HCC treatment
  - 89 underwent HCV treatment
  - Recurrence rates at 1 and 2 years for DAA treated vs untreated
    - 18.1 and 25% and 21.8 and 46.5%
- **Preda et al**
  - Reoccurrence during 44 month follow up:
  - HCC treated with resection, RFA or TACE and given DAA vs HCC treated but no antiviral therapy given (27% vs 91%)

# Preda et al


Recurrence rates
90%
80%
70%
60%
50%
40%
30%
20%
10%
0
6
12
18
24
30
36
42
48
54
60
66
72
*Months
DAA therapy
No antiviral therapy

# Conclusion

- Treatment of HCV following HCC treatment is beneficial
- Timing of treatment may be debatable

# Referrence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