

## Host-targeting agents for prevention and treatment of chronic hepatitis C - perspectives and challenges.

Mirjam Zeisel, Joachim Lupberger, Isabel Fofana, Thomas Baumert

► **To cite this version:**

Mirjam Zeisel, Joachim Lupberger, Isabel Fofana, Thomas Baumert. Host-targeting agents for prevention and treatment of chronic hepatitis C - perspectives and challenges.. *Journal of Hepatology*, Elsevier, 2013, 58 (2), pp.375-84. 10.1016/j.jhep.2012.09.022 . inserm-00741430

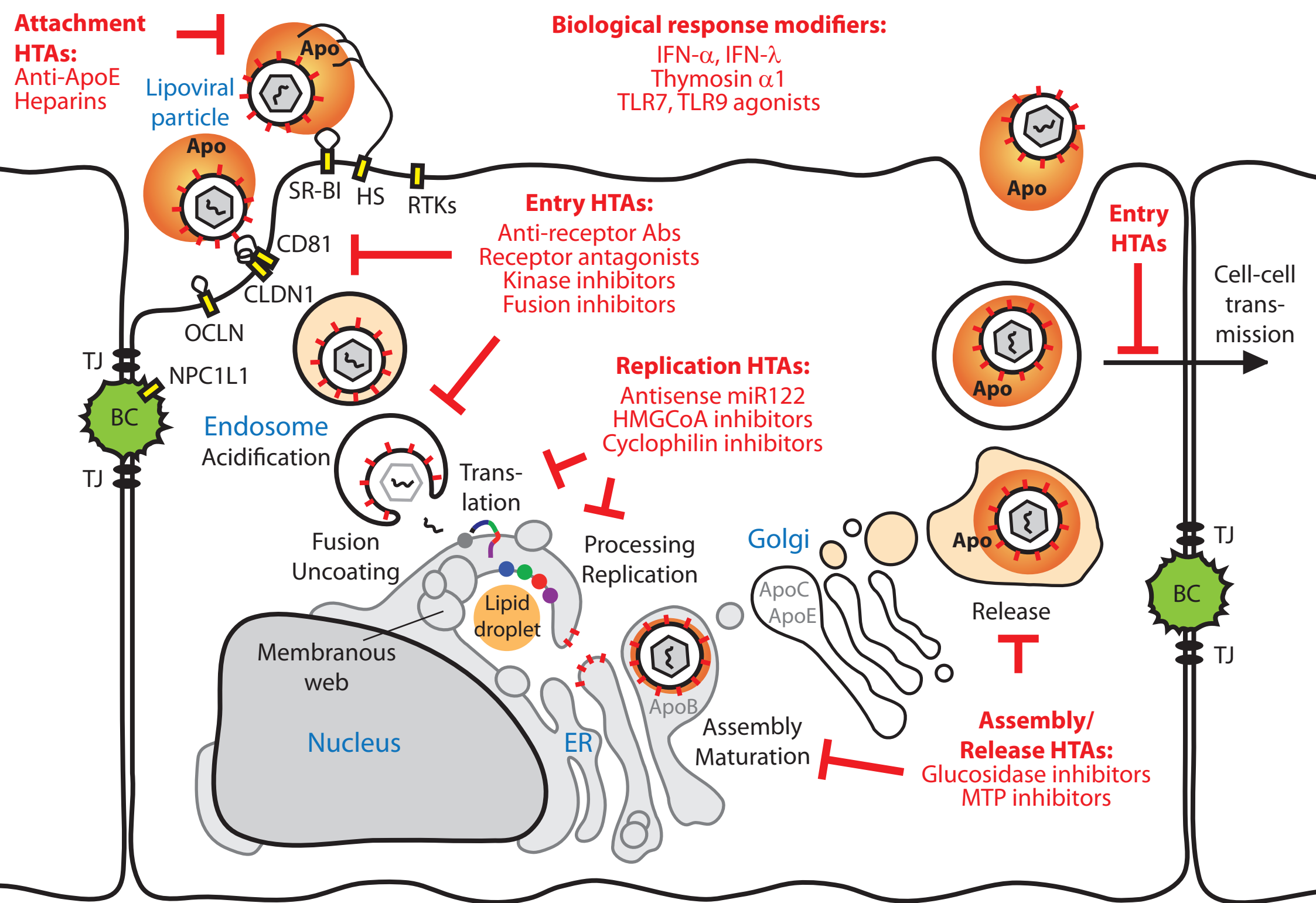
**HAL Id: inserm-00741430**

**<https://www.hal.inserm.fr/inserm-00741430>**

Submitted on 12 Oct 2012

**HAL** is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.



**Attachment HTAs:**  
Anti-ApoE  
Heparins

**Biological response modifiers:**  
IFN- $\alpha$ , IFN- $\lambda$   
Thymosin  $\alpha$ 1  
TLR7, TLR9 agonists

**Entry HTAs:**  
Anti-receptor Abs  
Receptor antagonists  
Kinase inhibitors  
Fusion inhibitors

**Replication HTAs:**  
Antisense miR122  
HMGCoA inhibitors  
Cyclophilin inhibitors

**Assembly/Release HTAs:**  
Glucosidase inhibitors  
MTP inhibitors

Lipoviral particle  
Apo  
SR-BI  
HS  
RTKs  
CD81  
CLDN1  
OCLN  
NPC1L1

**Endosome**  
Acidification

**Golgi**

Membranous web  
Nucleus

ER

Cell-cell transmission

TJ  
BC

TJ

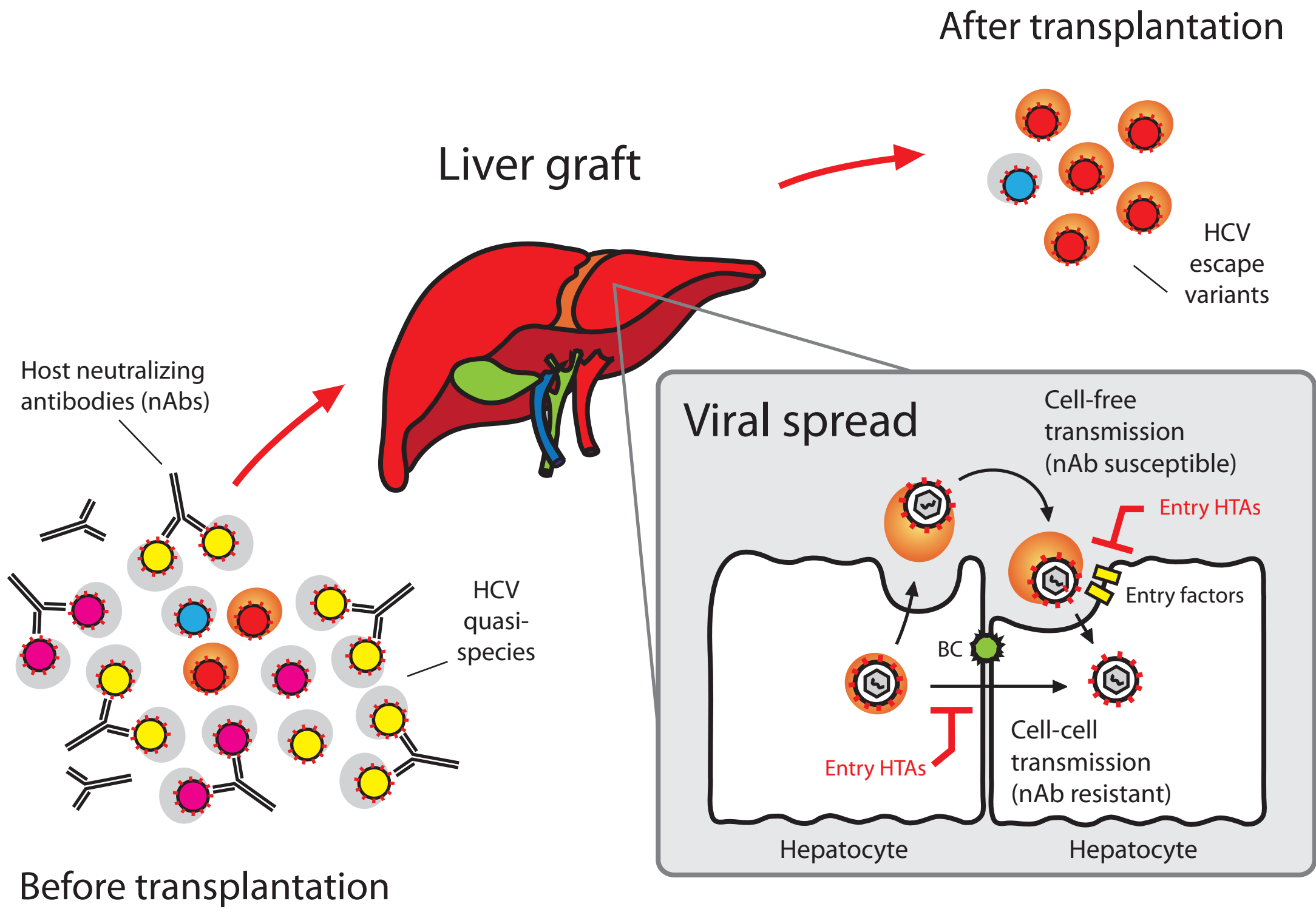
TJ

TJ

**Entry HTAs**

Release

**Assembly/Release HTAs:**



After transplantation

Liver graft

HCV escape variants

Host neutralizing antibodies (nAbs)

HCV quasi-species

Viral spread

Cell-free transmission (nAb susceptible)

Entry HTAs

Entry factors

BC

Entry HTAs

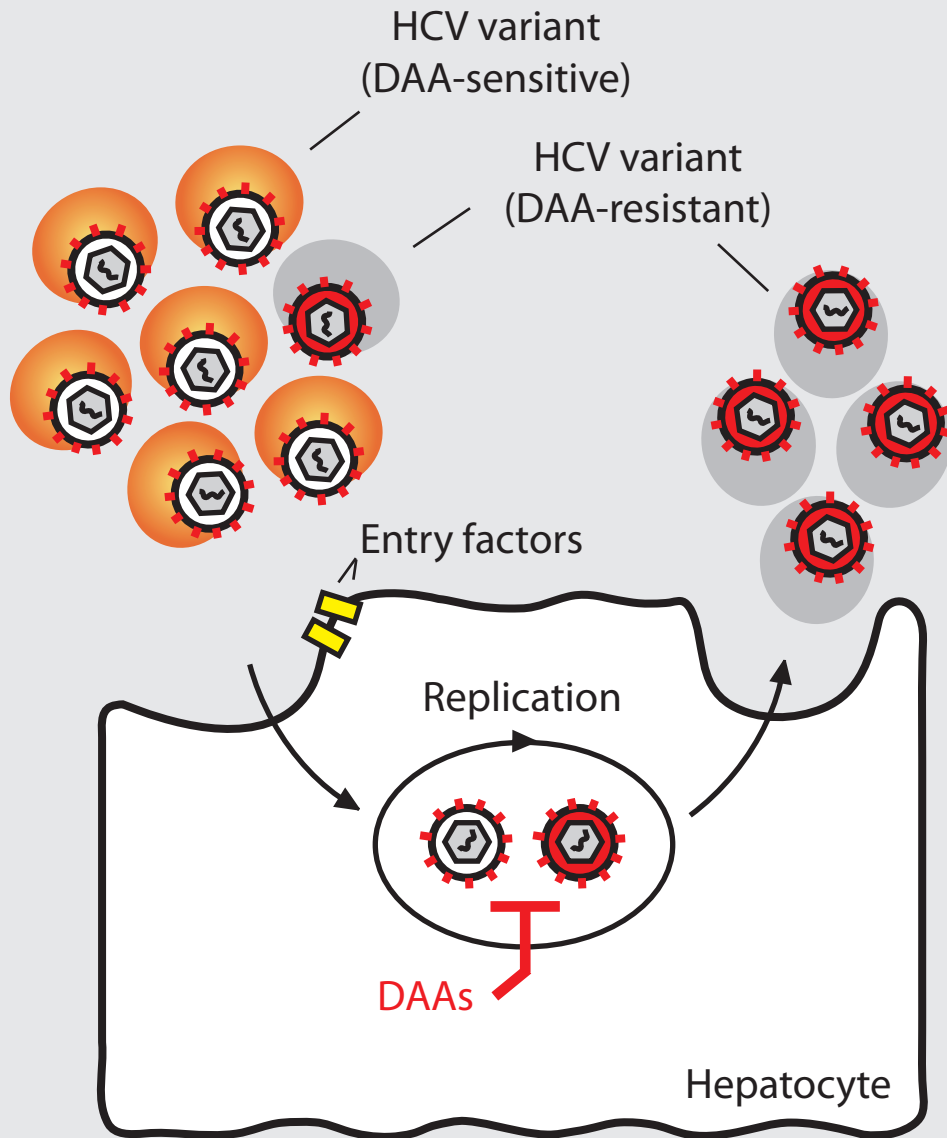
Cell-cell transmission (nAb resistant)

Hepatocyte

Hepatocyte

Before transplantation

## Direct-acting antivirals (DAAs)



## Host-targeting agents (HTAs)

