



123. Kongress der Deutschen Gesellschaft für Innere Medizin
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Highlights – Was ist neu für die Praxis?

Hepatitis C

Thomas Berg

Sektion Hepatologie

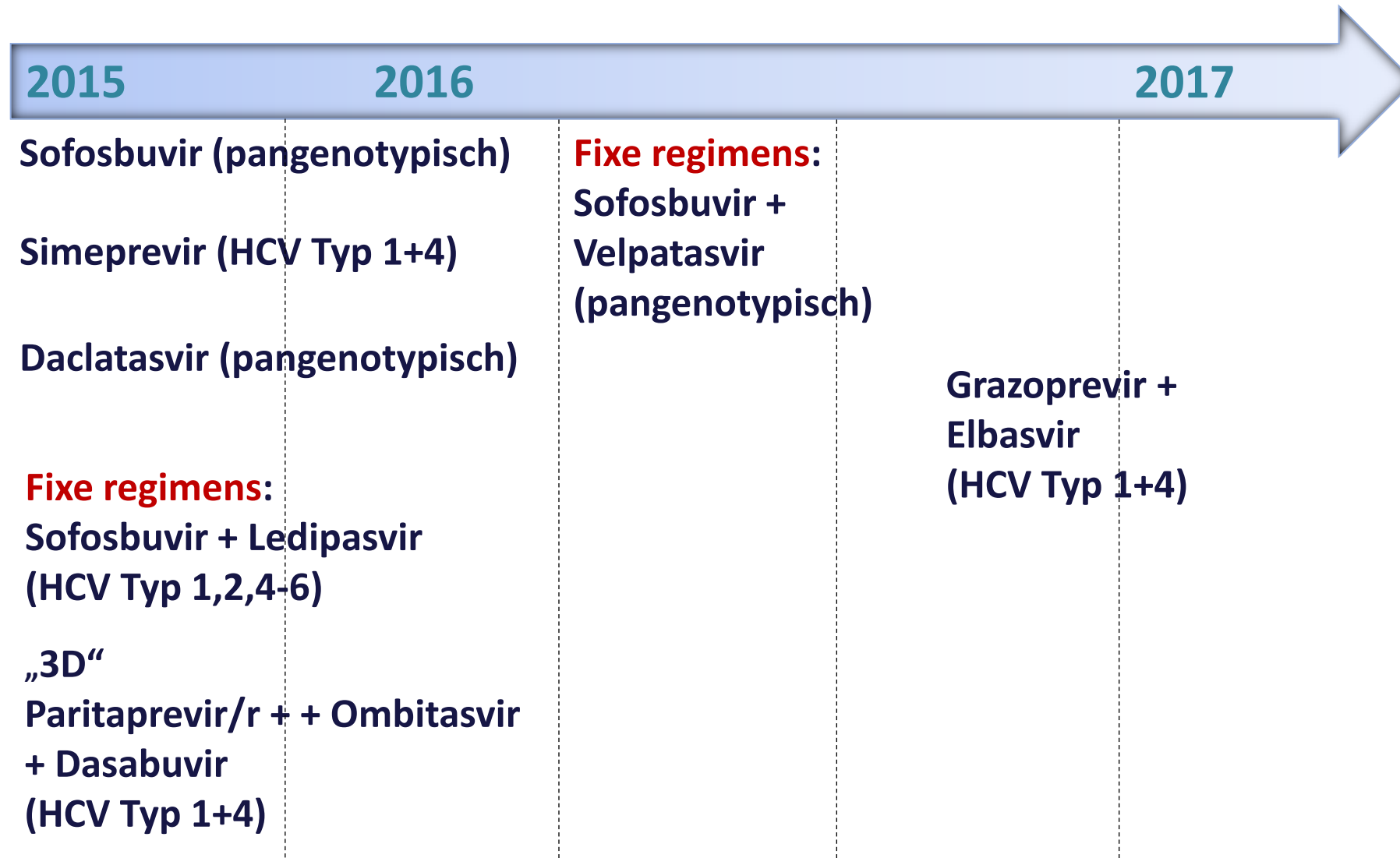
Klinik und Poliklinik für Gastroenterologie
und Rheumatologie

Universitätsklinikum Leipzig

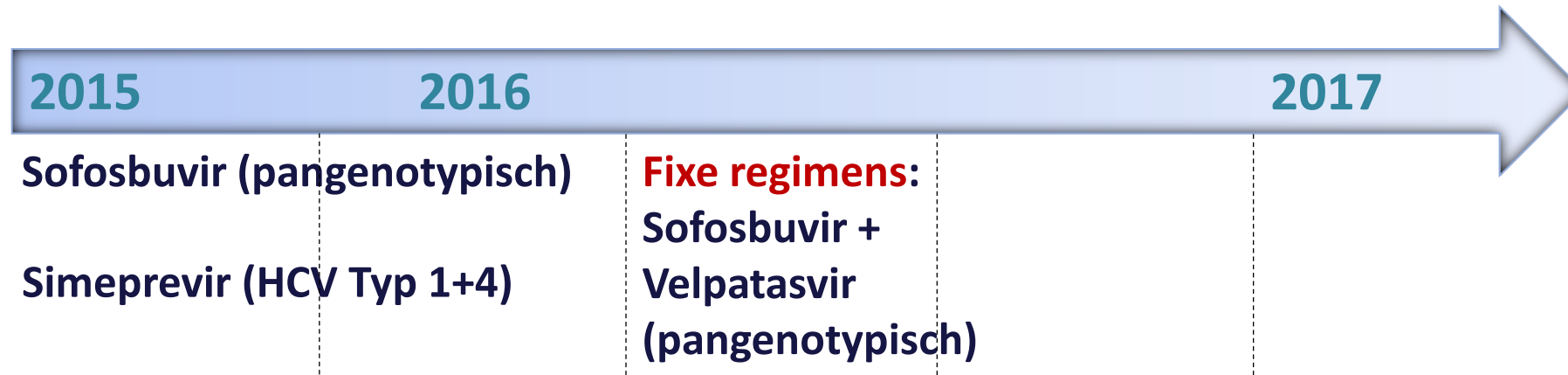
Leber- und Studienzentrums am Checkpoint, Berlin



Zugelassene DAAs in Deutschland



Zugelassene DAAs in Deutschland



**Heilungsraten in Studien und
„real-world“ $\geq 95\%$**

(HCV Typ 1,2,4-6)

„3D“

Paritaprevir/r + Ombitasvir
+ Dasabuvir
(HCV Typ 1+4)

Neue Leitlinien: DGVS und EASL

Empfehlungen zur Behandlung der Hepatitis C

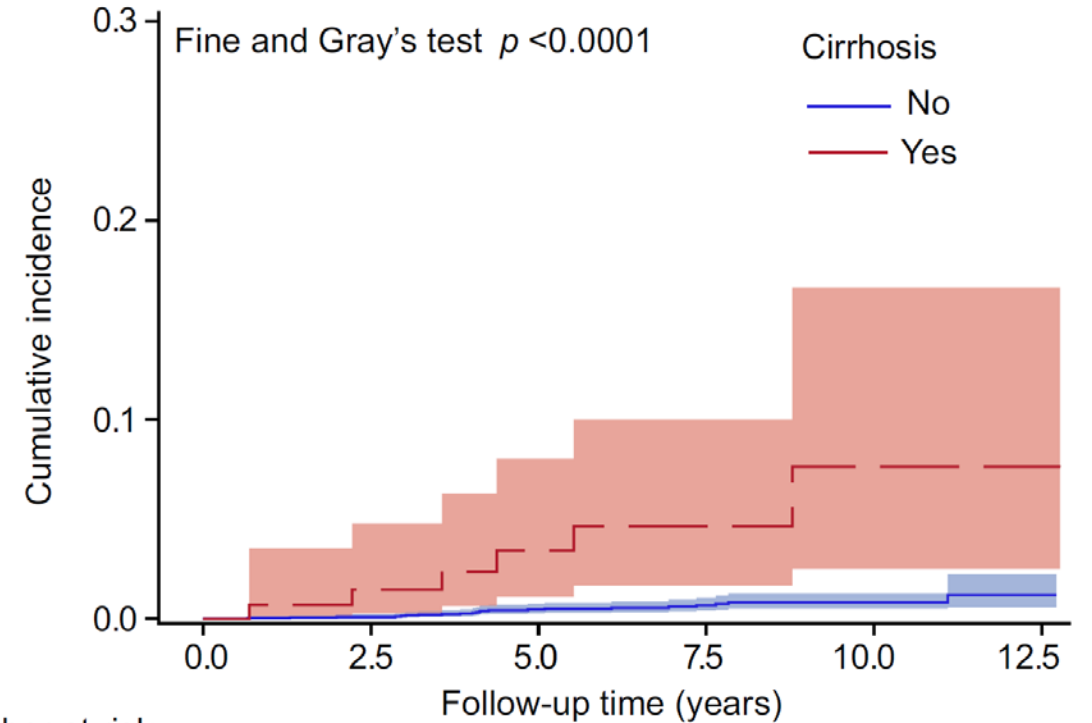
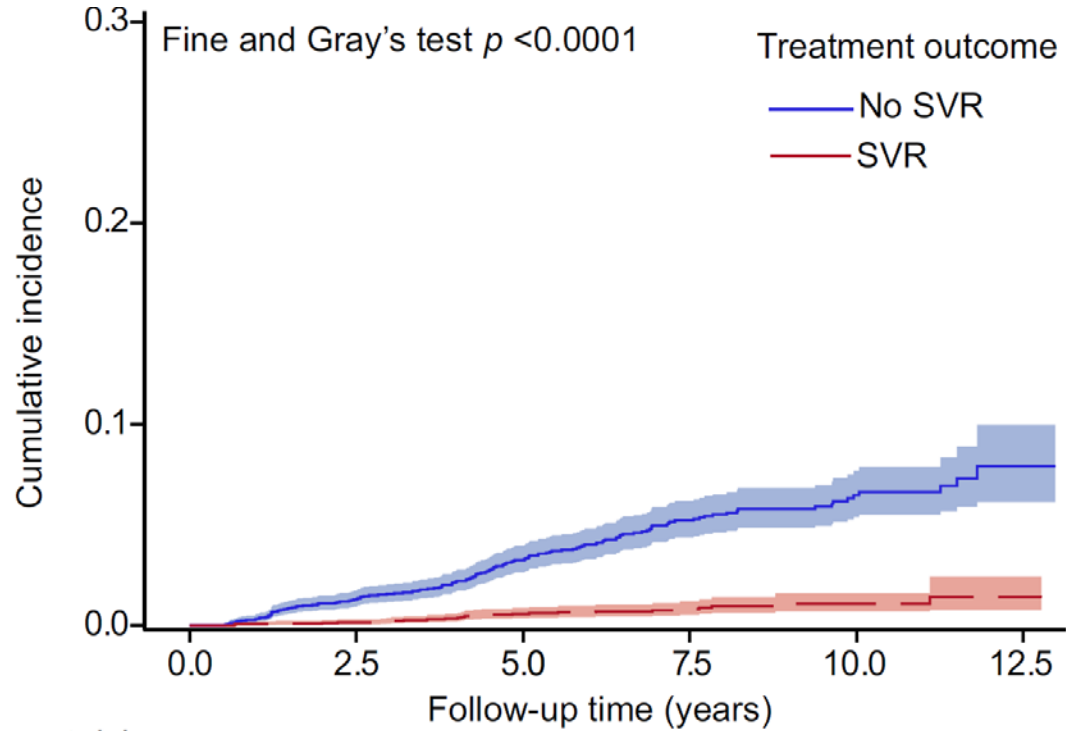


Combination regimen	Genotype 1	Genotype 2	Genotype 3	Genotype 4	Genotypes 5 and 6
Sofosbuvir + ribavirin	No	Suboptimal	Suboptimal	No	No
Sofosbuvir/ledipasvir ± ribavirin	Yes	No	No	Yes	Yes
Sofosbuvir/velpatasvir ± ribavirin	Yes	Yes	Yes	Yes	Yes
Ombitasvir/paritaprevir/ritonavir + dasabuvir ± ribavirin	Yes	No	No	No	No
Ombitasvir/paritaprevir/ritonavir ± ribavirin	No	No	No	Yes	No
Grazoprevir/elbasvir ± ribavirin	Yes	No	No	Yes	No
Sofosbuvir + daclatasvir ± ribavirin	Yes	Yes	Yes	Yes	Yes
Sofosbuvir + simeprevir ± ribavirin	Suboptimal	No	No	Yes	No

HCC Risiko und SVR

Bedeutung der SVR für das HCC Risiko

Bedeutung der Cirrhose für das HCC Risiko nach SVR



Number at risk

SVR	4663	3788	2637	1453	518	10
No SVR	3454	2778	1939	1152	478	26

Number at risk

Cirrhosis	145	122	81	52	20	2
No cirrhosis	4518	3666	2556	1401	498	8

Resistenzen



Die Achillesferse der Interferon-freien DAA Therapie

**The importance of resistance to direct antiviral drugs
in HCV infection in clinical practice**

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The next HCV regimens?

Anforderungen:

Pangenotypisch

SVR stabil \geq 98%

Wirksam bei NS5A Resistenz

Wirksam bei HCV Typ 3 Cirrhose

8 Wochen bei „unkomplizierter“ Infektion

Sicher – auch bei Niereninsuffizienz

1 Tablette pro Tag

Nächste Generation von NS5A und NS3A/4a Inhibitoren

Next Generation Direct-Acting Antivirals

Glecaprevir
(formerly ABT-493)
pangenotypic NS3/4A
protease inhibitor



Pibrentasvir
(formerly ABT-530)
pangenotypic NS5A
inhibitor

Collectively: G/P

In vitro:^{1,2}

- High barrier to resistance
- Potent against common NS3 polymorphisms (eg, positions 80, 155, and 168) and NS5A polymorphisms (eg, positions 28, 30, 31 and 93)
- Additive/synergistic antiviral activity

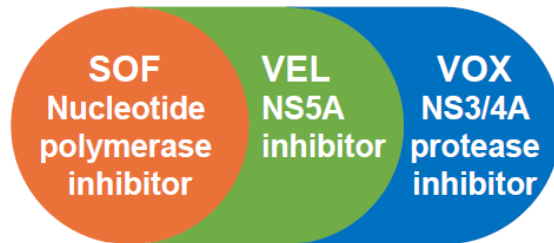
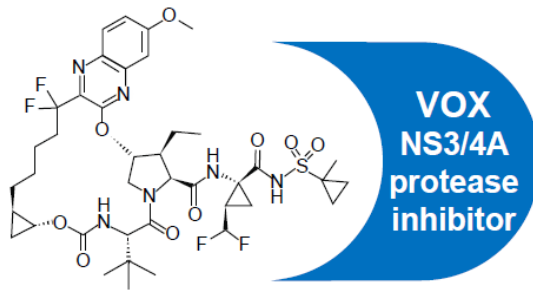
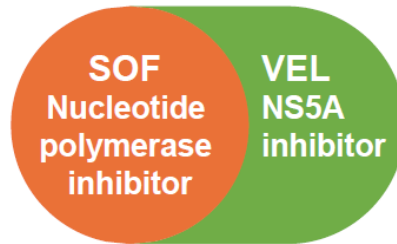
Clinical PK & metabolism:

- Once-daily oral dosing
- Minimal metabolism and primary biliary excretion
- Negligible renal excretion (<1%); no dose adjustment for CKD³

G/P is coformulated and dosed once daily as three 100 mg/40 mg pills for a total dose of 300 mg/120 mg
Glecaprevir was identified by AbbVie and Enanta

1. Ng TI, et al. Abstract 636. CROI, 2014.
2. Ng TI, et al. Abstract 639. CROI, 2014.
3. Kosloski M, et al. Abstract THU-230. EASL 2016.

Neue pangentypische Sofosbuvir Triple Therapie – POLARIS Studien



Sofosbuvir (SOF)/Velpatasvir (VEL)

- ◆ **SOF:** Nucleotide polymerase inhibitor with activity against HCV GT 1–6
- ◆ **VEL:** Potent pangentypic NS5A inhibitor

Voxilaprevir (VOX)

- ◆ HCV NS3/4A PI with potent antiviral activity against GT 1–6, including most RASs

SOF/VEL/VOX

- ◆ Once daily, oral, fixed-dose combination (400/100/100 mg) for GT 1–6

Cure for all HCV-infected patients – a tailored strategy

Treatment duration

(6-) 8 weeks

12 weeks

12 (-24) weeks + ribavirin

Easy-to-treat

Difficult-to-treat

Disease characteristics

No advanced fibrosis,
no co-morbidities, tx-naive

Compensated cirrhosis
HCV type 3

Decompensated cirrhosis,
DAA failure,
Type 3 cirrhosis plus BL NS5A RAVs

Cure for all HCV-infected patients – a tailored strategy

Treatment duration	Easy-to-treat	Disease characteristics
(6-) 8 weeks Appr. 80% of all HCV-infected patients in Germany		No advanced fibrosis, no co-morbidities, tx-naive
12 weeks		Compensated cirrhosis HCV type 3
12 (-24) weeks + ribavirin	Difficult-to-treat	Decompensated cirrhosis, DAA failure, Type 3 cirrhosis plus BL NS5A RAVs