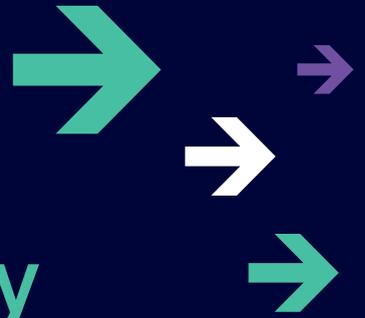


# Chronic HCV Infection: Extrahepatic Manifestations Summary



The impact of HCV infection can extend beyond the liver and may affect other organ systems<sup>1-4</sup>

Up to **74%** of people with HCV may experience extrahepatic manifestations (EHMs)<sup>3</sup>



People with an active HCV infection are more likely to experience mortality from both *hepatic* diseases (aHR 16.36,  $P < .0001$ ) and *extrahepatic* diseases (aHR 1.47,  $P = .0002$ ) in comparison to individuals who are HCV negative<sup>5</sup>



People with HCV who are injection drug users frequently suffer from multiple comorbidities and EHMs<sup>6</sup>

## Most common EHMs<sup>4</sup>

### Mixed cryoglobulinemic vasculitis\*



**>11x higher risk in people with HCV<sup>7</sup>**  
Symptoms include fatigue, purpura, arthralgia, and neuropathy<sup>4</sup>

#### B-cell cancers

Diffuse large B-cell lymphoma and lymphoplasmacytic lymphoma can occur<sup>8</sup>

#### B-cell non-Hodgkin lymphoma

**35x increased risk in people with HCV plus cryoglobulinemia<sup>9</sup>**

### Cardiovascular disease\*



**20% higher risk of cardiovascular events in people with HCV<sup>7,10</sup>**

Ischemic stroke<sup>11,12</sup>

Coronary artery disease<sup>13</sup>

Acute coronary syndrome<sup>14</sup>

### Insulin resistance and diabetes mellitus type 2\*



**58% higher risk of developing type 2 diabetes in people with HCV<sup>7</sup>**

Insulin resistance is an independent risk factor for fibrosis progression<sup>15</sup>

### Chronic kidney disease\*



**23% higher risk of developing chronic kidney disease in people with HCV<sup>7</sup>**

Range of renal symptoms from isolated proteinuria to end-stage renal disease<sup>4</sup>

### Miscellaneous manifestations



#### Sjogren's syndrome

**>2x higher risk of Sjogren's syndrome in people with HCV<sup>7</sup>**

#### Depression/psychiatric disorders\*

**>2x higher risk in people with HCV<sup>7</sup>**

Fatigue, depression, and worsening cognitive function are common<sup>16</sup>

## Rare EHMs<sup>4</sup>

### Skin\*



#### Lichen planus

**>2x higher risk in people with HCV<sup>7</sup>**

Planar, purple, polygonal, pruritic papules and plaques<sup>17</sup>

#### Porphyria cutanea tarda

**>8x higher risk in people with HCV<sup>7</sup>**

Cutaneous lesions in sun-exposed areas such as the hands and face<sup>2,17</sup>

### Other



**Other rare EHMs include<sup>4</sup>**

#### Hypothyroidism

#### Autoimmune cytopenia

Hemolytic anemia and thrombocytopenia<sup>4</sup>



**Treatment of HCV may be linked to an improvement in both hepatic and extrahepatic complications, with reductions in incidence and severity of EHMs<sup>4,18</sup>**

Beyond clinical improvements after treatment, in PWID there are reported improvements in self-esteem, confidence, empowerment, and energy levels<sup>19</sup>

\*Common comorbidities among PWID.<sup>6</sup>

## Abbreviations

aHR, adjusted hazard ratio; EHM, extrahepatic manifestation; HCV, hepatitis C virus; PWID, people who inject drugs; SLE, systemic lupus erythematosus.

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