| **Author year *Quality*** | **Study type** | **Country Dates of enrollment Number of centers (location)** | **Inclusion criteria** |
| --- | --- | --- | --- |
| Arase 2007204 *Fair* | Cohort\* | Japan 1989 to 2004 Single Center (Toranomon Hospital) | ≥60 years of age; ALT elevation greater than double upper limits within 6 months; no corticosteroids or antiviral agents in last 6 months; no HBV surface antigen, antinuclear antibodies, or antimitochondrial antibodies; leukocytes >3000/mm3, platelet count >80,000/mm3, and bilirubin <2.0 mg/mL; IFN therapy >4 weeks  Excluded: History of alcohol abuse or advanced cirrhosis, encephalopathy, bleeding esophageal varices, or ascites |
| Asahina 2010217 *Fair* | Cohort† | Japan 1992 to 2008 Single center (Musashino Red Cross Hospital) | HCV infection with histologically proven chronic hepatitis or cirrhosis |
| Backus 201169 *Fair* | Cohort‡ | U.S. (VA) 2001 to 2008 Multicenter (national) | HCV genotype 1, 2, or 3; treated with pegylated interferon + ribavirin  Exclusion: HIV infection, HCC prior to treatment |
| Butt 2017205 *Fair* | Cohort‡ | U.S. (VA) Enrollment dates NR Multicenter (national) | HCV infected initiating paritaprevir + ritonavir + ombitasvir + dasabuvir or ledipasvir + sofosbuvir |
| Carrat 2019168 French National Agency for Research on AIDS CO22 Hepather Cohort *Fair* | Cohort (prospective) | France 2012 to 2015 32 centers | Patients with chronic HCV infection recruited from 32 hepatology centers in France.  Excluded: HBV, HIV coinfection, previous HCC diagnosis, history of decompensated cirrhosis, liver transplant recipient |
| Cozen 2013206 San Francisco VA Cohort *Fair* | Cohort‡ | U.S. 1992 to 2007 Two centers (San Francisco VA and University of California at San Francisco) | >18 years of age, HCV infection, underwent liver biopsy and follow-up liver imaging study , biopsy, or clinic visit |
| Cozen 2013206  University of California at San Francisco Cohort *Fair* | Cohort‡ | U.S. 1992 to 2007 Two centers (San Francisco VA and University of California at San Francisco) | >18 years of age, HCV infection, underwent liver biopsy and follow-up liver imaging study , biopsy, or clinic visit |
| Dieperink 2014207 *Fair* | Cohort‡ | U.S. (VA) 1997 to 2009 Single center (Minneapolis VA) | Chronic HCV infection, initiated antiviral therapy |
| Dohmen 2013218 *Fair* | Cohort (prospective) | Japan 2004 to 2010 Multicenter (10 centers, primarily in Fukuoka) | Chronic HCV infection with viral load ≥5 log IU/mL; HBV negative Excluded: history of HCC or HCC developed in the first 6 months |
| El-Serag 2014215 *Fair* | Cohort‡ | U.S. (VA) 1999 to 2010 Multicenter (national) | HCV infection, ≥1 year followup in VA |
| Ikeda 1999219  *Fair* | Cohort\* | Japan 1974-1995  Single center (Toronoman Hospital) | Included: age 15 to 86  Excluded: HBV, HCC, cirrhosis |
| Imai 1998220 *Fair* | Cohort | Japan 1992 to 1993 Multicenter (8 centers, primarily in Osaka, Japan) | Included: adults with HCV, Childs A cirrhosis Excluded: HCC |
| Imazeki 2003208 *Fair* | Cohort§ | Japan 1986 to 1998 Single center (Chiba University Hospital) | Chronic HCV infection, underwent liver biopsy  Excluded: HCC detected within six months of liver biopsy |
| Innes 2011209 *Fair* | Cohort | U.K. 1996 to 2007 Multicenter (throughout Scotland) | HCV infection, treatment naive  Excluded: Nonsustained SVR (presence of viremia subsequent to meeting definition for SVR), liver transplant, HIV-positive, unknown treatment response |
| Ioannou 2018221 *Fair* | Cohort║ | U.S. (VA) 1999 to 2015 Multicenter (national) | Initiation of antiviral regimen within VA from January 1999 to December 2015 |
| Izumi 2005222 *Fair* | Cohort† | Japan 1994 to 2001 Single center (Musashino Red Cross Hospital) | Chronic HCV infection, underwent interferon monotherapy |
| Kasahara 1998223 *Fair* | Cohort¶ | Japan 1989 to 1995 10 centers (primarily in Osaka) | Included: adults with HCV Excluded: HCC, cirrhosis |
| Kasahara 2004210 *Fair* | Cohort¶ | Japan Enrollment dates NR Multicenter (number and location of centers unclear) | Histological diagnosis of chronic hepatitis or cirrhosis; no clinical complications of cirrhosis; no evidence of HCC on ultrasonography and/or computed tomography  Excluded: HBV; HIV; co-existing liver diseases such as autoimmune hepatitis or primary biliary cirrhosis; excessive alcohol consumption (>80 g/day) |
| Kurokawa 2009224 *Fair* | Cohort ¶ (prospective) | Japan 2002 to 2005 Multicenter (number of centers unclear, primarily in Osaka) | All patients treated with interferon alfa-2a + ribavirin during study period Excluded: HBV, HIV positive; liver disease including history of HCC or HCC within 6 months after treatment cessation |
| Lee 2017225 *Fair* | Cohort | South Korea 2004 to 2013 Single center (Inha University Hospital) | HCV positive treated during study period Excluded: HBV positive; liver disease |
| Maruoka 2012211  *Fair* | Cohort§ | Japan1986 to 2005Single center (Chiba University Hospital) | HCV positive, underwent liver biopsy  Excluded: Other causes of chronic liver disease, HIV-positive, detection of HCC within 1 year of antiviral therapy, dropout within 1 year |
| Okanoue 2002226 *Fair* | Cohort | Japan 1995 to 1998 Multicenter (15 centers) | HCV infection, 18 to 68 years of age  Excluded: HBV infection, HIV infection, daily alcohol intake >60 g of ethanol for more than 5 years, ALT <30 IU/L |
| Osaki 2012227 *Fair* | Cohort | Japan 2002 to 2010 Single center (Osaka Red Cross Hospital) | HCV infection, elevated liver enzymes, and ultrasound image demonstrating chronic liver damage  Exclusion: neutrophil count <750 cells/uL, platelet count <50,000 cells/uL, hemoglobin level ≤9.0 g/dL, and renal insufficiency (serum creatinine levels >2 mg/dL), follow-up <24 weeks after the termination of the interferon therapy, previously treated for HCC, or occurrence of HCC during or within 24 weeks after treatment |
| Singal 2013212 *Fair* | Cohort | U.S. 2001 to 2006 Single center (Parkland Health and Hospital System) | HCV infection, life expectancy >5 years, platelet count >50,000/uL |
| Sinn 2008231 *Fair* | Cohort | South Korea 1994 to 2004 Single center (Sungkyunkwan University School of Medicine) | HCV infection |
| Tanaka 2000228 *Fair* | Cohort | Japan 1980 to 1996 Multicenter (6 hospitals in Osaka) | Chronic HCV infection with liver biopsy  Excluded: HBV infection, HCC or other liver disease such as alcoholic liver disease, autoimmune hepatitis, or primary biliary cirrhosis |
| Tateyama 2011229 *Fair* | Cohort | Japan,  1992 to 2003 Single center (National Nagasaki Medical Center) | Chronic HCV infection |
| Tseng 2016216 *Fair* | Cohort | Taiwan 2005 to 2011 Single center (Dalin Tzu Chi General Hospital) | Age ≥65 years, chronic HCV infection, treated with pegylated interferon; elevated ALT Excluded: Decompensated cirrhosis; malignant neoplasms; autoimmune diseases; HIV infection, neutropenia; thrombocytopenia; anemia; poorly controlled psychiatric diseases |
| Yoshida 1999230  *Fair* | Cohort# | Japan 1986 to 1998  Multicenter (8 centers throughout Japan [Inhibition of Hepatocarcinogenesis by Interferon Therapy Study Group]) | HCV positive with liver biopsy  Excluded: HCC or other liver diseases (chronic HBV, alcoholic liver disease, autoimmune hepatitis, or primary biliary cirrhosis) |
| Yoshida 2002213 *Fair* | Cohort# | Japan 1986 to 1998 Multicenter (8 centers throughout Japan [Inhibition of Hepatocarcinogenesis by Interferon Therapy Study Group]) | HCV positive, underwent liver biopsy  Exclusion: HBV co-infection, alcoholic liver disease, autoimmune hepatitis, or primary biliary cirrhosis |
| Yu 2006214 *Fair* | Cohort | Taiwan 1991 to 2003 Multicenter (4 centers in Taiwan) | Biopsy-proven chronic HCV infection, with or without cirrhosis  Excluded: HBV or HIV, autoimmune hepatitis, alcohol abuse (≥80 g ethanol per day), HCC at treatment initiation or within 6 months |

\* Study populations overlap.

† Study populations overlap.

‡ Study population appears to overlap with Ioannou 2018.

§ Study populations overlap.

║ Study population appears to overlap with Backus 2011, Butt 2017, Cozen 2013, Dieperink 2014, and El-Serag 2014.

¶ Study populations likely overlap.

# Study populations appear to overlap.

**Abbreviations:** ALT = alanine aminotransferase; HBV = hepatitis B virus; HCC = hepatocellular carcinoma; HCV = hepatitis C virus; IFN = interferon; NR = not reported; SVR = sustained virologic response; U.K. = United Kingdom; U.S. = United States of America; VA = Veterans Affairs.