Supplemental data

We followed the published recommendations from the Preferred Reporting Items for Systematic Reviews and Meta-Analysis (PRISMA; *Moher D. et al. BMJ 2009;339:b2535*) during all stages of this meta-analysis.

Search strategy:

INCLUSION CRITERIA

1. All original studies (i) featuring ≥ 10 adult (ii) treatment-experience (iii) hepatitis C genotype 4 patients (iv) failing prior interferon-based therapy (v) and received subsequent retreatment with PEG-INF and RBV (vi)

EXCLUSION CRITERIA

1. Non-original studies
2. Non-English articles
3. Duplicate publications featuring the same patient group(s)
4. Studies including children or adolescents (i), or violate inclusion criteria

Searched databases and sources:

1. MEDLINE
2. EMBASE
3. Manual search of abstracts from the following annual liver meetings (2012-2013) using the terms (‘experienced’, ‘re’, ‘prior’, ‘before’, ‘previously’, and ‘failed’):
    a. American Association for the Study of Liver Diseases (AASLD)
    b. Asian Pacific Association for the Study of Liver (APASL)
    c. Digestive Diseases Week (DDW)
    d. European Association for the Study of the Liver (EASL)
4. Manual review of bibliographies from published studies

Search phrase:

No restrictions or filters were imposed for database searches. Search term (‘genotype 4’) in MEDLINE AND EMBASE, and search terms (‘experienced’, ‘re’, ‘prior’, ‘before’, ‘previously’, and ‘failed’) in abstracts from liver meetings were pre-determined through the agreement of all authors prior to conducting searches.

Data extraction:

- A standardized data extraction sheet was created and agreed upon by all authors to be used on studies which fulfilled the inclusion and exclusion criteria. Two authors (B. Zhang and B. Yee) independently extracted data from included studies, and all data was then reviewed by one author for quality (B. Zhang) prior to compilation for meta-analysis
- Items on standardized data extraction sheet:
    - Author
    - Study name
    - Year of publication
    - Journal of publication
    - Type of publication – abstract or full paper
    - Country(-ies) of origin
    - Study design – prospective or retrospective
    - Study type – randomized controlled trial (RCT) or observational
    - Intention-to-treat – yes or no
    - Duration(s) of treatment
    - Number of participants included in study
    - Participants' gender
    - Participants' ages (mean or median)
    - Number of participants included in primary analysis
    - For prior non-responders versus relapsers:
        - Rapid virologic response (RVR)
        - Early virologic response (EVR)

        - Sustained virologic response (SVR)
        - SVR in those achieving RVR
        - SVR in those achieving EVR
    - Other patient characteristics reported by authors which may impact treatment efficacy (ex: HBV status, HIV status, organ transplants, other concomitant liver diseases, etc.) and their actual effect on treatment efficacy

Articles selected for further review and subsequently excluded from meta-analysis for failing to meeting criteria (in alphabetical order):

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