two segments: before and after the exposure period (April 2019). We will investigate effect modification by the following prespecified factors: Covid-19 reporting, proportion of reports from traditional (print) versus other media types (online).

**Results** We will present raw counts of reports with ‘in mice’ in the headline and/or lede as an indication of the trends present in news reporting of scientific findings in mice over the course of six years. Results of the interrupted time series analysis will be presented as the ratio of the odds of reporting ‘in mice’ in the headline and/or lede before compared with after April 2019, with a value greater than 1.0 indicating greater odds of reporting ‘in mice’ before compared with after April 2019 and a value below 1.0 indicating lower odds of reporting ‘in mice’.

**Conclusions** This study will provide information on the association of a corrective social media intervention and subsequent accuracy of health and biomedical media reporting. Improved accuracy of media reporting will ensure users of health research can make better and fully informed healthcare decisions.

**Poster abstracts**

176 **METHODOLOGICAL QUALITY OF SYSTEMATIC REVIEWS ON TREATMENTS FOR OSTEOPOROSIS: A CROSS-SECTIONAL STUDY**

Leonard TF Ho*, 1Anna KN Tsoi, 2Hrene XY Wu, 3Charlene HL Wong, 2Vincent CH Chung. 1School of Chinese Medicine, Faculty of Medicine, The Chinese University of Hong Kong, Hong Kong, Hong Kong; 2The Jockey Club School of Public Health and Primary Care, Faculty of Medicine, The Chinese University of Hong Kong, Hong Kong, Hong Kong; 3Xiangya School of Public Health, Central South University, Hunan, China

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**Objectives** Osteoporosis is a common musculoskeletal disease. Systematic reviews (SRs) provide the best evidence of effective treatment strategies for clinical practice. However, the validity of the evidence is prone to be undermined by methodological flaws. This cross-sectional study appraised the methodological quality of a representative sample of SRs on osteoporotic treatments.

**Method** The Cochrane Database of Systematic Reviews, EMBASE, MEDLINE, and PsycINFO were searched for SRs that included at least one meta-analysis on osteoporotic treatments which were published between 2008 and 2019. The methodological quality of the included SRs was evaluated using the validated AMSTAR (A MeaSurement Tool to Assess systematic Reviews) 2 instrument. Associations between bibliographical characteristics and methodological quality were explored using regression analyses.

**Results** A total of 101 SRs were included and appraised. One (1.0%) SR was of high quality, 3 (3.0%) were of moderate quality, 11 (10.9%) were of low quality, and 86 (85.1%) were of critically low quality. Specifically, 99 (98.0%) SRs did not explain the selection of study designs, 85 (84.2%) did not provide a list of excluded studies and justify the reasons for exclusion, 85 (84.2%) did not report on funding sources among included studies, and 72 (71.3%) did not state explicitly their review methods in an a priori manner and justify any significant deviations from their protocol. Multivariable ordinal regression analysis illustrated that being published after 2017 [adjusted odds ratio (AOR): 5.48; confidence interval (CI): 1.12 – 26.89] was associated with higher methodological quality. SRs focusing on pharmacological interventions [AOR: 0.24; CI: 0.06 – 0.96] were associated with lower methodological quality.

**Conclusions** The methodological quality of SRs on osteoporotic treatments is disappointing. Future SRs in this area should pay attention to explaining the selection of study designs, providing a list for the excluded studies and justifying such exclusions, reporting on the sources of funding among included studies, pre-specifying methodology and justifying any deviations from the protocol.