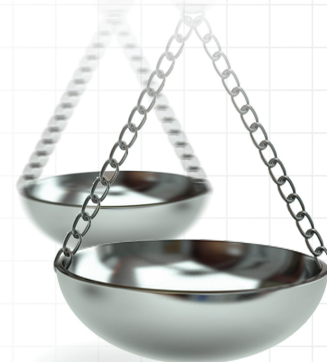




Introducing Volume 10 of the *Journal of Comparative Effectiveness Research*

Laura Dormer*,¹ 

¹ Editor – Journal of Comparative Effectiveness Research, Future Medicine Ltd, Unitec House, London N3 1QB, UK

*Author for correspondence: l.dormer@futuremedicine.com

Journal of **Comparative Effectiveness Research**

I am very pleased to welcome readers to the tenth volume of the *Journal of Comparative Effectiveness Research* (JCER). As in previous years, it is great to start off this issue with a look back on some of our article highlights from 2020, alongside some of this month's key content.

First draft submitted: 6 November 2019; Accepted for publication: 6 November 2020; Published online: 8 January 2021

Keywords: [content highlights](#) • [highly read content](#) • [real-world evidence](#)

In this issue

The first issue of 2021 features a wide range of research, and I have selected three papers to highlight here. Opioid use and misuse has been a subject of interest (and concern) for some time now, and although there is a minimal role of opioids in endometriosis practice guidelines, a survey of American College of Obstetricians and Gynecologists members found that 24% of obstetricians/gynecologists have prescribed opioids for endometriosis and 89% have prescribed opioids after laparoscopic hysterectomy. In the first research article in this issue, Lamvu *et al.* sought to identify potential risk factors for opioid use and prolonged opioid use in women with endometriosis, which, although established in other patient populations, remain largely undefined in endometriosis [1].

Various social determinants have been linked with health outcomes, and it has been found that low socioeconomic status is predictive of adverse clinical outcomes for patients with cardiovascular disease. In their study, Hoyler *et al.* evaluate the independent effects of patient insurance status, among other social determinants of health, and hospital burden status on readmission rates following acute myocardial infarction [2].

Systematic reviews frequently feature in the medical literature; however, they can often be inconclusive. In this research article, Dosenovic examine the factors associated with conclusiveness of systematic reviews, specifically regarding the efficacy and safety of interventions for neuropathic pain (pain caused by injury to the nerves), to help improve the availability of evidence for this difficult-to-treat condition [3].

Content highlights of 2020

As shown in [Table 1](#), the top ten most read content in JCER in 2020 (as of 5 November 2020) again represents a broad spread of topics and article types, from original research to expert commentary and consensus.

Unsurprisingly, an article on COVID-19 has made the top ten; while JCER has seen fewer COVID-related submissions than our infectious disease sister titles, we have received some interesting articles, including this commentary from Ramagopalan and Wasiak on COVID-19 and real-world evidence (RWE), in which the authors highlight the role RWE has played so far in aiding decision making and highlight its potential for future healthcare emergencies [11]. As they state, “COVID-19 has led to an unprecedented level of cooperation among academia, industry, policy makers and public health officials to find ways to diagnose, prevent and cure the condition”.

The importance of real-world data is also highlighted in the White Paper from Seewald *et al.* published in issue 3 of 2020 [7]. The paper is authored by 11 industry RWE experts, as part of the ‘RWE Leadership Forum’: a group of industry leaders aiming to understand and respond to internal or external real-world data/real-world evidence challenges and opportunities. The aim of the White Paper is to clarify the rules of engagement between pharma and healthcare in order to establish trust-based partnerships.

Table 1. Top Journal of Comparative Effectiveness Research 2020 articles by readership [†] .							
Rank	Full-text downloads	Article type	Title	Authors	Volume (issue)	Altmetric score	Dimensions score
1	3253	Research article	Comparative safety and efficacy of ozanimod vs fingolimod for relapsing multiple sclerosis	Swallow E, Patterson-Lomba O, Yin L <i>et al.</i>	9(4)	3	2
2	2922	Research article	Safety and effectiveness of ataluren: comparison of results from the STRIDE Registry and CINRG DMD Natural History Study	Mercuri E, Muntoni F, Osorio AN <i>et al.</i>	9(5)	2	8
3	2633	Review	Propensity score matching and inverse probability of treatment weighting to address confounding by indication in comparative effectiveness research of oral anticoagulants	Allan V, Ramagopalan SV, Mardekian J <i>et al.</i>	9(9)	1	
4	2570	White paper	Strengthening pharma's contract with society: the value of trusted partnerships between pharma and healthcare facilitated by real-world data	Seewald MJ, Plumb JM, Gutierrez B <i>et al.</i>	9(3)	7	
5	2122	Research article	Real-world outcomes of long-term prednisone and deflazacort use in patients with Duchenne muscular dystrophy: experience at a single, large care center	Marden JR, Freimark J, Yao Z, Signorovitch J, Tian C, Wong BL	9(3)	23	1
6	2021	Editorial	Can real-world evidence save pharma US\$1 billion per year? A framework for an integrated evidence generation strategy	Olson M	9(2)	2	
7	1937	Research article	A randomized controlled clinical trial of a hypothetically stored amniotic membrane for use in diabetic foot ulcers	Serena TE, Yaakov R, Moore S <i>et al.</i>	9(1)	2	4
8	1618	Commentary	Life after COVID-19: R WE going to help?	Ramagopalan SV, Wasiak R	9(8)	11	
9	1509	Research article	Adding pertuzumab to adjuvant therapy for high-risk HER2-positive early breast cancer in APHINITY: a GRADE analysis	Zambelli A, Pappagallo G, Marchetti P	9(6)	1	1
10	1271	Systematic review	Budesonide/formoterol therapy: effective and appropriate use in asthma and chronic obstructive pulmonary disease	Mapel DW, Roberts MH, Davis J	9(4)	4	
[†] As on 5 November 2020.							

The top ten also includes an interesting editorial from Olson, which presents an evidence-powered operating framework for applying an integrated evidence generation strategy within a pharma organization, with the aim of closing the gap that typically exists between research, clinical development, market access and commercial insights [9].

Neurology proved a highly read topic in 2020, with three of the top ten focusing on this clinical area. Swallow *et al.* examined the comparative safety and efficacy of ozanimod versus fingolimod for relapsing multiple sclerosis. In the absence of head-to-head randomized trials between these treatments, the authors designed their study to indirectly compare the key safety and efficacy outcomes using a matching-adjusted indirect comparison [4]. In addition, both the articles of Mercuri *et al.* and Marden *et al.* [5,8], focus on Duchenne muscular dystrophy (DMD); Mercuri *et al.* compared the results from the STRIDE Registry and CINRG DMD Natural History Study to assess the safety and effectiveness of ataluren treatment, while Marden *et al.* looked at the experience of the Cincinnati Children's Hospital Medical Center to assess outcomes among patients with DMD receiving deflazacort or prednisone in real-world practice.

Atrial fibrillation is a type of cardiac arrhythmia that affects millions worldwide, and patients are often prescribed oral anticoagulants to reduce the risk of stroke. In their review article published in issue 9, Allan *et al.* describe the fundamentals of propensity score matching and inverse probability of treatment weighting methods to address confounding by indication in real-world studies, appraise similarities and differences between these techniques and give illustrative examples from some case studies comparing the effectiveness and safety of oral anticoagulants [6].

Another condition that affects quality of life worldwide is diabetes, and it has been estimated that 15% of diabetics will develop a chronic ulcer at some point in their lives. In their research article, Serena *et al.* conduct a randomized controlled trial across 14 centers to assess clinical outcomes associated with the use of hypothermically stored amniotic membrane plus standard of care compared with standard of care alone for the treatment of diabetic foot ulcers [10].

In their research article published in issue 6, Zambelli *et al.* conducted a GRADE analysis on data from the APHINITY trial, a randomized, placebo-controlled trial of 1 year of adjuvant pertuzumab added to standard adjuvant chemotherapy plus trastuzumab in patients with HER2-positive early breast cancer, to ascertain the strength of the emerging recommendations with the aim of supporting physicians in their clinical practice [12].

Finally, Mapel *et al.* conducted a systematic review of comparative effectiveness studies of asthma and chronic obstructive pulmonary disease and the use of budesonide/formoterol combination maintenance therapy, highlighting the availability of good quality articles but that all had limitations [13].

Overall, the most read content from 2020 again highlights the broad range of interests of our readers, and I look forward to seeing the hot topics that emerge throughout 2021.

Conclusion

I hope our readers enjoyed the articles published in 2020, and found them interesting and informative. As always, we are very grateful to all our Editorial Board members, authors, peer reviewers and readers for supporting the journal, especially during such a challenging period of time. I look forward to working with you all again in 2021 – please do not hesitate to get in touch if you are interested in contributing to the journal.

Financial & competing interests disclosure

L Dormer is an employee of Future Medicine Ltd. The author has no other relevant affiliations or financial involvement with any organization or entity with a financial interest in or financial conflict with the subject matter or materials discussed in the manuscript apart from those disclosed.

No writing assistance was utilized in the production of this manuscript.

References

1. Lamvu G, Soliman AM, Johns B, Vora JB, Estes SJ. Impact of pain and non-pain comorbidities on opioid use in women with endometriosis. *J. Comp. Eff. Res.* 10(1), 17–27 (2021).
2. Hoyler MM, Abramovitz MD, Ma X *et al.* Social determinants of health affect unplanned readmissions following acute myocardial infarction. *J. Comp. Eff. Res.* 10(1), 39–54 (2021).
3. Dosenovic S, Dujmic A, Nujic D *et al.* Reasons and factors associated with inconclusiveness of systematic reviews about interventions for neuropathic pain. *J. Comp. Eff. Res.* 10(1), 67–75 (2021).

4. Swallow E, Patterson-Lomba O, Yin L *et al.* Comparative safety and efficacy of ozanimod versus fingolimod for relapsing multiple sclerosis. *J. Comp. Eff. Res.* 9(4), 275–285 (2020).
5. Mercuri E, Muntoni F, Osorio AN *et al.* Safety and effectiveness of ataluren: comparison of results from the STRIDE Registry and CINRG DMD Natural History Study. *J. Comp. Eff. Res.* 9(5), 341–360 (2020).
6. Allan V, Ramagopalan SV, Mardekian J *et al.* Propensity score matching and inverse probability of treatment weighting to address confounding by indication in comparative effectiveness research of oral anticoagulants. *J. Comp. Eff. Res.* 9(9), 603–614 (2020).
7. Seewald MJ, Plumb JM, Gutierrez B *et al.* Strengthening pharma's contract with society: the value of trusted partnerships between pharma and healthcare facilitated by real-world data. *J. Comp. Eff. Res.* 9(3), 155–159 (2020).
8. Marden JR, Freimark J, Yao Z, Signorovitch J, Tian C, Wong BL. Real-world outcomes of long-term prednisone and deflazacort use in patients with Duchenne muscular dystrophy: experience at a single, large care center. *J. Comp. Eff. Res.* 9(3), 177–189 (2020).
9. Olson M. Can real-world evidence save pharma US\$1 billion per year? A framework for an integrated evidence generation strategy. *J. Comp. Eff. Res.* 9(2), 79–82 (2020).
10. Serena TE, Yaakov R, Moore S *et al.* A randomized controlled clinical trial of a hypothermically stored amniotic membrane for use in diabetic foot ulcers. *J. Comp. Eff. Res.* 9(1), 23–34 (2020).
11. Ramagopalan SV, Wasiak R. Life after COVID-19: R WE going to help? *J. Comp. Eff. Res.* 9(8), 525–526 (2020).
12. Zambelli A, Pappagallo G, Marchetti P. Adding pertuzumab to adjuvant therapy for high-risk HER2-positive early breast cancer in APHINITY: a GRADE analysis. *J. Comp. Eff. Res.* 9(6), 423–430 (2020).
13. Mapel DW, Roberts MH, Davis J. Budesonide/formoterol therapy: effective and appropriate use in asthma and chronic obstructive pulmonary disease. *J. Comp. Eff. Res.* 9(4), 231–251 (2020).