

**Supplementary Table 1.** Final list of unique webpages included in our study

<https://www.mayoclinic.org/tests-procedures/shoulder-replacement/about/pac-20519121>  
<https://bostonshoulderstitute.com/patient-resources/modules/resection-arthroplasty/>  
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9169730/>  
<https://www.brighamandwomens.org/assets/bwh/patients-and-families/rehabilitation-services/pdfs/shoulder-total-shoulder-arthroplasty-protocol.pdf>  
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5916625/>  
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3103967/>  
<https://www.sciencedirect.com/science/article/pii/S1877056812001545>  
<https://www.hopkinsmedicine.org/orthopaedic-surgery/specialty-areas/shoulder/treatments-procedures/total-shoulder-replacements.html>  
<https://orthop.washington.edu/patient-care/shoulder/shoulder-arthritis-hemiarthroplasty.html>  
[https://journals.lww.com/jorthotrauma/Fulltext/2021/08002/Shoulder\\_Hemiarthroplasty\\_for\\_Proximal\\_Humerus.3.aspx](https://journals.lww.com/jorthotrauma/Fulltext/2021/08002/Shoulder_Hemiarthroplasty_for_Proximal_Humerus.3.aspx)  
<https://online.boneandjoint.org.uk/doi/full/10.1302/0301-620X.89B2.18161>  
<https://www.wheelessonline.com/joints/hemiarthroplasty-of-the-shoulder/>  
[https://www.jsesinternational.org/article/S2666-6383\(21\)00189-4/fulltext](https://www.jsesinternational.org/article/S2666-6383(21)00189-4/fulltext)  
<https://www.massgeneral.org/assets/mgh/pdf/orthopaedics/sports-medicine/physical-therapy/rehabilitation-protocol-for-total-shoulder-arthroplasty-and-hemi.pdf>  
<https://www.mayoclinic.org/tests-procedures/shoulder-replacement/multimedia/partial-shoulder-replacement/vid-20519218>  
<https://www.mountsinai.org/health-library/surgery/shoulder-replacement>  
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4634807/>  
<https://openorthopaedicsjournal.com/VOLUME/11/PAGE/1115/FULLTEXT/>  
<https://eor.bioscientifica.com/view/journals/eor/6/10/2058-5241.6.210014.xml>  
<https://online.boneandjoint.org.uk/doi/full/10.1302/0301-620X.100B4.BJJ-2017-0495.R2>  
<https://hopkinsmedicine.org/orthopaedic-surgery/specialty-areas/shoulder/treatments-procedures/reverse-prosthesis.html>  
<https://my.clevelandclinic.org/health/treatments/8290-shoulder-replacement>  
<https://bynder.uwhealth.org/m/aca1d1abb04ef408/original/Rehab-Guideline-Shoulder-Arthroplasty.pdf>  
[https://www.hss.edu/condition-list\\_shoulder-replacement.asp](https://www.hss.edu/condition-list_shoulder-replacement.asp)  
[https://www.jshoulderelbow.org/article/S1058-2746\(18\)30937-6/fulltext](https://www.jshoulderelbow.org/article/S1058-2746(18)30937-6/fulltext)  
<https://www.frontiersin.org/articles/10.3389/fsurg.2021.721054/full>  
<https://eor.bioscientifica.com/view/journals/eor/3/2/2058-5241.3.170044.xml>  
<https://josr-online.biomedcentral.com/articles/10.1186/s13018-015-0244-2>  
<https://www.mayoclinic.org/diseases-conditions/rotator-cuff-injury/multimedia/reverse-shoulder-replacement-video/vid-20086567>  
<https://www.hopkinsmedicine.org/orthopaedic-surgery/specialty-areas/shoulder/treatments-procedures/reverse-prosthesis.html>  
<https://orthop.washington.edu/patient-care/articles/shoulder/reverse-shoulder-replacement.html>  
<https://www.umms.org/ummc/health-services/orthopedics/services/shoulder/replacement/reverse-total-replacement>  
<https://www.hopkinsmedicine.org/health/treatment-tests-and-therapies/reverse-total-shoulder-replacement>  
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5444609/>  
<https://www.sciencedirect.com/science/article/pii/S1877056813002648>  
<https://www.ucsfhealth.org/education/recovering-from-shoulder-replacement-surgery>  
<https://medlineplus.gov/ency/article/007387.htm>  
<https://www.brighamandwomens.org/orthopaedic-surgery/shoulder-replacement-surgery>  
<https://www.ahn.org/services/orthopaedic/treatments/orthopaedic-surgery/joint-replacement/shoulder>  
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3093753/>  
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4272694/>  
<https://www.dukehealth.org/treatments/orthopaedics/shoulder-replacement-surgery>  
<https://orthop.washington.edu/patient-care/articles/shoulder/total-shoulder-replacement-arthroplasty-for-shoulder-arthritis.html>  
<https://www.mysouthernhealth.com/what-to-expect-after-shoulder-replacement-surgery/>  
<https://health.clevelandclinic.org/when-is-shoulder-replacement-a-good-option-for-osteoarthritis/>  
<https://www.verywellhealth.com/shoulder-hemiarthroplasty-2549889#:~:text=A%20shoulder%20hemiarthroplasty%20is%20a%20partial%20shoulder%20replacement%2C,due%20to%20chronic%20disease%20or%20an%20acute%20injury.>  
<https://www.verywellhealth.com/shoulder-hemiarthroplasty-2549889>  
[https://www.medicinenet.com/what\\_is\\_a\\_hemiarthroplasty\\_of\\_the\\_shoulder/article.htm](https://www.medicinenet.com/what_is_a_hemiarthroplasty_of_the_shoulder/article.htm)  
<https://www.arthritis-health.com/surgery/shoulder-surgery/types-shoulder-replacement-surgeries>  
<https://www.webmd.com/arthritis/shoulder-replacement-surgery-what-to-know>

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## Supplementary Table 1. Continued

<https://www.arthritis-health.com/surgery/shoulder-surgery/who-gets-reverse-shoulder-replacement>  
<https://www.arthritis-health.com/surgery/shoulder-surgery/total-shoulder-replacement-surgery>  
<https://www.drugs.com/cg/shoulder-arthroplasty.html>  
<https://www.reboundwear.com/blogs/injuries/how-long-is-recovery-from-shoulder-replacement-surgery>  
<https://www.thereadypatient.com/shoulder/shoulder-pain-relief-surgical-treatment-options.html>  
[https://regenexx.com/learnmore/?matchtype=e&device=c&keyword=partial%20shoulder%20replacement&network=o&mclid=e45505cf-4b411a50714667768087b2af&utm\\_source=bing&utm\\_medium=cpc&utm\\_campaign=Shoulder&utm\\_term=partial%20shoulder%20replacement&utm\\_content=Shoulder%20-%20Replacement](https://regenexx.com/learnmore/?matchtype=e&device=c&keyword=partial%20shoulder%20replacement&network=o&mclid=e45505cf-4b411a50714667768087b2af&utm_source=bing&utm_medium=cpc&utm_campaign=Shoulder&utm_term=partial%20shoulder%20replacement&utm_content=Shoulder%20-%20Replacement)  
<https://aidmyfrozenshoulder.com/frozen-shoulder/tshellz-frozen-shoulder-lecture-response.php>  
<https://www.healthline.com/health/shoulder-replacement>  
<https://www.zimmerbiomet.com/en/products-and-solutions/specialties/shoulder.html>  
<https://www.djoglobal.com/products/djo-surgical/altivate-anatomic>  
<https://www.thereadypatient.com/shoulder/anatomic-vs-reverse-shoulder-replacements-what-are-the-differences.html>  
<https://shoulderarthroplasty.arthrex.com/>  
<https://www.liftmyarm.com/shoulder-replacement/>  
<https://www.healthgrades.com/right-care/shoulder-replacement/>  
<https://emedicine.medscape.com/article/2000818-overview>  
<https://atlasofscience.org/when-shoulder-replacement-fails-what-happens-next/>  
<https://www.orthobullets.com/shoulder-and-elbow/3074/shoulder-hemiarthroplasty>  
<https://www.orthobullets.com/trauma/12175/shoulder-hemiarthroplasty-for-proximal-humerus-fracture>  
<https://emedicine.medscape.com/article/2000818-overview#:~:text=Shoulder%20hemiarthroplasty%20is%20a%20shoulder,ailments%20of%20the%20glenohumeral%20articulation.>  
<https://radiopaedia.org/articles/shoulder-hemiarthroplasty?lang=us>  
<https://surgeryreference.aofoundation.org/orthopedic-trauma/adult-trauma/proximal-humerus/isolated-anatomical-neck-dislocation/hemiarthroplasty>  
<https://www.healio.com/news/orthopedics/20120325/surgical-approach-hemiarthroplasty-vs-total-arthroplasty>  
<https://www.healio.com/news/orthopedics/20201015/anatomic-shoulder-replacement-may-help-patients-stay-active-after-surgery>  
<https://www.orthobullets.com/shoulder-and-elbow/3075/total-shoulder-arthroplasty>  
<https://www.orthobullets.com/shoulder-and-elbow/3076/reverse-shoulder-arthroplasty>  
[https://www.physio-pedia.com/Total\\_Shoulder\\_Arthroplasty](https://www.physio-pedia.com/Total_Shoulder_Arthroplasty)  
[https://hopebraincenter.com/services/chronic-acute-pain/?utm\\_source=localiq&utm\\_medium=cpc&utm\\_campaign=semhopebrainandbody-chronicpain&scid=4209411&kw=769170&pub\\_cr\\_id=84181717819980&network=o&device=c&targetid=kwd-84182454382738:loc-71262&loc\\_interest\\_ms=&loc\\_physical\\_ms=94258&tc=9ac01da62c8917c838ae7f1fe813a524&rl\\_key=b24f4cf68eae4fd1f4b8c77708a1c371](https://hopebraincenter.com/services/chronic-acute-pain/?utm_source=localiq&utm_medium=cpc&utm_campaign=semhopebrainandbody-chronicpain&scid=4209411&kw=769170&pub_cr_id=84181717819980&network=o&device=c&targetid=kwd-84182454382738:loc-71262&loc_interest_ms=&loc_physical_ms=94258&tc=9ac01da62c8917c838ae7f1fe813a524&rl_key=b24f4cf68eae4fd1f4b8c77708a1c371)  
<https://www.partanclinic.com/partial-shoulder-replacement-2/>  
<https://brianhollowaymd.com/what-is-a-shoulder-hemiarthroplasty/>  
<https://www.sonuahluwalamd.com/shoulder-hemiarthroplasty/>  
<https://www.gomberamd.com/partial-shoulder-replacement.html>  
<https://www.princetonorthopaedic.com/services/shoulder/shoulder-hemiarthroplasty/>  
<https://www.physio.co.uk/what-we-treat/surgery/shoulder/hemiarthroplasty.php>  
<https://www.naplesorthopedic.com/shoulder-pain-partial-shoulder-replacement/>  
<https://www.orthoatx.com/partial-shoulder-replacement>  
<https://www.summithealth.com/partial-and-total-shoulder-replacement>  
<http://healthy-txt.com/drmehta/shoulder/partial-shoulder-replacement/>  
<https://www.gomberamd.com/blog/what-to-expect-after-your-shoulder-replacement-arthroplasty-12906.html>  
<https://www.atlantaboneandjoint.com/shoulderreplacement.html>  
<https://www.orthoatlanta.com/media/understanding-the-different-types-of-shoulder-replacement-surgery>  
[https://www.resurgens.com/shoulder/procedures/anatomic-total-shoulder-arthroplasty#:~:text=Anatomic%20Total%20Shoulder%20Arthroplasty%20\(Total,for%20less%20painful%20shoulder%20movement.](https://www.resurgens.com/shoulder/procedures/anatomic-total-shoulder-arthroplasty#:~:text=Anatomic%20Total%20Shoulder%20Arthroplasty%20(Total,for%20less%20painful%20shoulder%20movement.)  
<https://www.drgordongroh.com/orthopaedic-injuries-treatment/shoulder/standard-total-shoulder-replacement/>  
<https://www.jaredmahylismd.com/anatomic-total-shoulder-arthroplasty-orthopedic-surgery-detroit-mi.html>  
<https://www.roberttashjianmd.com/anatomic-and-reverse-total-shoulder-replacement-orthopaedics-surgeon-salt-lake-city-ut.html>  
<https://jmclean.com.au/conditions-and-treatments/shoulder/conventional-shoulder-replacement/>

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**Supplementary Table 1.** Continued

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<https://seattleshoulderdoc.com/shoulder-replacement/>  
<https://www.resurgens.com/shoulder/procedures/anatomic-total-shoulder-arthroplasty#:~:text=Anatomic%20total%20shoulder%20arthroplasty%20removes%20damaged%20sections%20of,Shoulder%20Arthroplasty%3F%20Why%20is%20Anatomic%20Shoulder%20Arthroplasty%20Performed%3F>  
<https://shoulderelbow.org/2016/09/01/reverse-shoulder-replacement/>  
<https://www.inlandortho.net/wp-content/uploads/2020/06/Patient-Guide-to-Total-Shoulder-Arthroplasty-Finished.pdf>  
<https://www.resurgens.com/shoulder/procedures/anatomic-total-shoulder-arthroplasty>  
<https://www.nathanfaulknermd.com/anatomic-total-shoulder-replacement/>  
<https://www.peoriashoulder.com/surgical-procedures/anatomic-total-shoulder-replacement/>  
<https://www.kburnsmd.com/features/anatomic-shoulder-replacement/>  
<https://motorcityorthopedics.com/expertise/shoulder/anatomic-total-shoulder-replacement/>  
<https://www.atlanticortho.com/shoulder-replacement-program/reverse-total-shoulder-arthroplasty/>  
<https://www.upperextremityspecialists.com/blog/when-a-reverse-shoulder-arthroplasty-is-the-best-option>  
<https://www.advancedjointreplacementcenter.com/blog/benefits-of-reverse-shoulder-replacement-26479.html>  
<https://www.orthoatlanta.com/media/reverse-shoulder-replacement-5-things-you-can-expect>  
<https://peterdipaolomd.com/reverse-total-shoulder-replacement/>  
<https://www.caryortho.com/reverse-total-shoulder-replacement-explained/>  
<https://www.morephysicaltherapy.com/Injuries-Conditions/Shoulder/Research-Articles/Problems-Unique-To-the-Reverse-Total-Shoulder-Replacement/a~4606/article.html>  
<https://www.columbusshoulderdoc.com/blog/the-difference-between-standard-shoulder-replacement-and-reverse-total-shoulder-replacement>  
<https://www.humpalphysicaltherapy.com/Injuries-Conditions/Shoulder/Surgery/Reverse-Shoulder-Arthroplasty/a~6576/article.html>  
<https://www.choosept.com/guide/physical-therapy-guide-total-shoulder-arthroplasty-replacement>  
<https://www.oawj.com/2019/09/06/what-is-a-shoulder-arthroplasty/>  
[https://www.avera.org/services/ortho/shoulder/?msclkid=f887ad19084e12105fbdca0c388f23a&utm\\_source=bing&utm\\_medium=cpc&utm\\_campaign=Ortho%20Specialties%20MOFU%3A%20Yankton%3A%20Non-Brand&utm\\_term=shoulder%20replacement%20surgery&utm\\_content=Shoulder](https://www.avera.org/services/ortho/shoulder/?msclkid=f887ad19084e12105fbdca0c388f23a&utm_source=bing&utm_medium=cpc&utm_campaign=Ortho%20Specialties%20MOFU%3A%20Yankton%3A%20Non-Brand&utm_term=shoulder%20replacement%20surgery&utm_content=Shoulder)  
<https://www.orthovirginia.com/shoulder-hemiarthroplasty-partial-replacement>  
<https://www.orthovirginia.com/shoulder-hemiarthroplasty-partial-replacement>  
<https://www.honorhealth.com/medical-services/orthopedics/shoulder-replacement-surgery>  
<https://orthoinfo.aaos.org/en/treatment/shoulder-joint-replacement/>  
<https://orthoinfo.aaos.org/en/treatment/reverse-total-shoulder-replacement/>  
<https://www.gbmc.org/what-is-reverse-shoulder-replacement-surgery-and-is-it-right-for-you>  
<https://www.virtua.org/articles/what-is-reverse-shoulder-replacement>  
<https://myhealth.alberta.ca/Health/aftercareinformation/pages/conditions.aspx?hwid=abo1301>  
[https://en.wikipedia.org/wiki/Shoulder\\_replacement](https://en.wikipedia.org/wiki/Shoulder_replacement)

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