# Supplementary Materials 4 – list of included papers

Alam, K., & Schofield, D. (2018). Economic evaluation of genomic sequencing in the paediatric population: a critical review. European Journal of Human Genetics, 26(9), 1241-1247. doi:http://dx.doi.org/10.1038/s41431-018-0175-6

Annemans, L., Redekop, K., & Payne, K. (2013). Current methodological issues in the economic assessment of personalized medicine. Value in Health, 16(6), S20-S26.

Bennette, C. S., Trinidad, S. B., Fullerton, S. M., Patrick, D., Amendola, L., Burke, W., . . . Veenstra, D. L. (2013). Return of incidental findings in genomic medicine: Measuring what patients value-development of an instrument to measure preferences for information from next-generation testing (IMPRINT). Genetics in Medicine, 15(11), 873-881. doi:http://dx.doi.org/10.1038/gim.2013.63

Bennette, C. S., Gallego, C. J., Burke, W., Jarvik, G. P., & Veenstra, D. L. (2015). The cost-effectiveness of returning incidental findings from next-generation genomic sequencing. Genetics in Medicine, 17(7), 587-595.

Burris, H. A., Saltz, L. B., & Yu, P. P. (2018). Assessing the value of next-generation sequencing tests in a dynamic environment. American Society of Clinical Oncology Educational Book, 38, 139-146.

D'Andrea, E., Marzuillo, C., Pelone, F., De Vito, C., & Villari, P. (2015). Genetic testing and economic evaluations: a systematic review of the literature. Epidemiologia e prevenzione, 39(4 Supplement 1), 45-50.

Doble, B., Harris, A., Thomas, D. M., Fox, S., & Lorgelly, P. (2013). Multiomics medicine in oncology: Assessing effectiveness, cost-effectiveness and future research priorities for the molecularly unique individual. Pharmacogenomics, 14(12), 1405-1417. doi:http://dx.doi.org/10.2217/pgs.13.142

Doble, B., Tan, M., Harris, A., & Lorgelly, P. (2015). Modeling companion diagnostics in economic evaluations of targeted oncology therapies: Systematic review and methodological checklist. Expert Review of Molecular Diagnostics, 15(2), 235-254. doi:http://dx.doi.org/10.1586/14737159.2014.929499

Doble, B. (2016). Budget impact and cost-effectiveness: can we afford precision medicine in oncology? Scandinavian Journal of Clinical and Laboratory Investigation Supplement, 245, S6-S11. doi:https://dx.doi.org/10.1080/00365513.2016.1206437

Fahr, P., Buchanan, J., & Wordsworth, S. (2019). A Review of the Challenges of Using Biomedical Big Data for Economic Evaluations of Precision Medicine. Applied Health Economics and Health Policy, 17(4), 443-452. doi:http://dx.doi.org/10.1007/s40258-019-00474-7

Fleeman, N., Payne, K., Newman, W. G., Howell, S. J., Boland, A., Oyee, J., . . . Dickson, R. (2013). Are health technology assessments of pharmacogenetic tests feasible? A case study of CYP2D6 testing in the treatment of breast cancer with tamoxifen. Personalized Medicine, 10(6), 601-611. doi:http://dx.doi.org/10.2217/pme.13.60

Fragoulakis, V., Mitropoulou, C., Van Schaik, R. H., Maniadakis, N., & Patrinos, G. P. (2016). An Alternative Methodological Approach for Cost-Effectiveness Analysis and Decision Making in Genomic Medicine. OMICS A Journal of Integrative Biology, 20(5), 274-282. doi:http://dx.doi.org/10.1089/omi.2016.0018

Fugel, H. J., Nuijten, M., Postma, M., & Redekop, K. (2016). Economic evaluation in stratified medicine: Methodological issues and challenges. Frontiers in Pharmacology, 7(MAY). doi:http://dx.doi.org/10.3389/fphar.2016.00113

Garattini, L., Curto, A., & Freemantle, N. (2015). Personalized medicine and economic evaluation in oncology: All theory and no practice? Expert Review of Pharmacoeconomics and Outcomes Research, 15(5), 733-738. doi:http://dx.doi.org/10.1586/14737167.2015.1078239

Garfield, S., Polisena, J., Spinner, D. S., Postulka, A., Lu, C. Y., Tiwana, S. K., . . . Longacre, M. (2016). Health Technology Assessment for Molecular Diagnostics: Practices, Challenges, and Recommendations from the Medical Devices and Diagnostics Special Interest Group. Value in Health, 19(5), 577-587. doi:http://dx.doi.org/10.1016/j.jval.2016.02.012

Gavan, S. P., Thompson, A. J., & Payne, K. (2018). The economic case for precision medicine. Expert Review of Precision Medicine and Drug Development, 3(1), 1-9.

Grosse, S. D. (2014). Economic analyses of genetic tests in personalized medicine: clinical utility first, then cost utility. Genetics in Medicine, 16(3), 225-227.

Hart, M. R., & Spencer, S. J. (2019). Consideration for employer-based and geographic attributes included in value assessment methods of next-generation sequencing tests. Journal of Managed Care and Specialty Pharmacy, 25(8), 936-940. doi:http://dx.doi.org/10.18553/jmcp.2019.25.8.936

Haycox, A., Pirmohamed, M., McLeod, C., Houten, R., & Richards, S. (2014). Through a Glass Darkly: Economics and Personalised Medicine. PharmacoEconomics, 32(11), 1055-1061. doi:http://dx.doi.org/10.1007/s40273-014-0190-6

Hayeems, R. Z., Luca, S., Pullenayegum, E., Stephen Meyn, M., & Ungar, W. J. (2019). Genome diagnostics: Novel strategies for measuring value. Journal of Managed Care and Specialty Pharmacy, 25(10), 1096-1101. doi:http://dx.doi.org/10.18553/jmcp.2019.25.10.1096

Mistry, H., & Mason, J. (2018). Diagnostic Assessment Reviews: is cost-effectiveness analysis helpful or necessary? Journal of health services research & policy, 23(4), 222-242.

Mollison, L., O'Daniel, J. M., Henderson, G. E., Berg, J. S., & Skinner, D. (2020). Parents' perceptions of personal utility of exome sequencing results. 1(4), 752-757.

Oosterhoff, M., van der Maas, M. E., & Steuten, L. M. G. (2016). A Systematic Review of Health Economic Evaluations of Diagnostic Biomarkers. Applied Health Economics and Health Policy, 14(1), 51-65. doi:http://dx.doi.org/10.1007/s40258-015-0198-x

Payne, K., McAllister, M., & Davies, L. M. (2013). Valuing the economic benefits of complex interventions: When maximising health is not sufficient. Health Economics (United Kingdom), 22(3), 258-271. doi:http://dx.doi.org/10.1002/hec.2795

Payne, K., Eden, M., Davison, N., & Bakker, E. (2017). Toward health technology assessment of whole-genome sequencing diagnostic tests: Challenges and solutions. Personalized Medicine, 14(3), 235-247. doi:http://dx.doi.org/10.2217/pme-2016-0089

Payne, K., Gavan, S. P., Wright, S. J., & Thompson, A. J. (2018). Cost-effectiveness analyses of genetic and genomic diagnostic tests. Nature Reviews Genetics, 19(4), 235-246. doi:https://dx.doi.org/10.1038/nrg.2017.108

Phillips, K. A., Sakowski, J. A., Trosman, J., Douglas, M. P., Liang, S.-Y., & Neumann, P. (2014a). The economic value of personalized medicine tests: what we know and what we need to know. Genetics in Medicine, 16(3), 251-257.

Phillips, K. A., Trosman, J. R., Kelley, R. K., Pletcher, M. J., Douglas, M. P., & Weldon, C. B. (2014b). Genomic sequencing: assessing the health care system, policy, and big-data implications. Health Affairs, 33(7), 1246-1253.

Phillips, K. A., Pletcher, M. J., & Ladabaum, U. (2015). Is the “$1000 Genome” really $1000? Understanding the full benefits and costs of genomic sequencing. Technology and health care: official journal of the European Society for Engineering and Medicine, 23(3), 373.

Phillips, K. A., Douglas, M. P., Trosman, J. R., & Marshall, D. A. (2017). "What Goes Around Comes Around": Lessons Learned from Economic Evaluations of Personalized Medicine Applied to Digital Medicine. Value in Health, 20(1), 47-53. doi:http://dx.doi.org/10.1016/j.jval.2016.08.736

Phillips, K. A., Deverka, P. A., Marshall, D. A., Wordsworth, S., Regier, D. A., Christensen, K. D., & Buchanan, J. (2018). Methodological issues in assessing the economic value of next-generation sequencing tests: many challenges and not enough solutions. Value in Health, 21(9), 1033-1042.

Pirmohamed, M. (2010). Acceptance of biomarker‐based tests for application in clinical practice: criteria and obstacles. Clinical Pharmacology & Therapeutics, 88(6), 862-866.

Regier, D. A., Peacock, S. J., Pataky, R., van der Hoek, K., Jarvik, G. P., Hoch, J., & Veenstra, D. (2015). Societal preferences for the return of incidental findings from clinical genomic sequencing: a discrete-choice experiment. CMAJ Canadian Medical Association Journal, 187(6), E190-E197. doi:https://dx.doi.org/10.1503/cmaj.140697

Regier, D. A., Weymann, D., Buchanan, J., Marshall, D. A., & Wordsworth, S. (2018). Valuation of Health and Nonhealth Outcomes from Next-Generation Sequencing: Approaches, Challenges, and Solutions. Value in Health, 21(9), 1043-1047. doi:http://dx.doi.org/10.1016/j.jval.2018.06.010

Rogowski, W., Payne, K., Schnell-Inderst, P., Manca, A., Rochau, U., Jahn, B., . . . Siebert, U. (2015). Concepts of ‘personalization’in personalized medicine: implications for economic evaluation. PharmacoEconomics, 33(1), 49-59.

Schwarze, K., Buchanan, J., Taylor, J. C., & Wordsworth, S. (2018). Are whole-exome and whole-genome sequencing approaches cost-effective? A systematic review of the literature. Genetics in Medicine, 20(10), 1122-1130.

Shabaruddin, F. H., Fleeman, N. D., & Payne, K. (2015). Economic evaluations of personalized medicine: existing challenges and current developments. Pharmacogenomics and Personalized Medicine, 8, 115.

Siamoglou, S., Karamperis, K., Mitropoulou, C., & Patrinos, G. P. (2020). Costing Methods as a Means to Measure the Costs of Pharmacogenomics Testing. The journal of applied laboratory medicine, 5(5), 1005-1016. doi:http://dx.doi.org/10.1093/jalm/jfaa113

Spackman, E., Hinde, S., Bojke, L., Payne, K., & Sculpher, M. (2017). Using cost-effectiveness analysis to quantify the value of genomic-based diagnostic tests: recommendations for practice and research. Genetic Testing and Molecular Biomarkers, 21(12), 705-716.

Veenstra, D. L., Roth, J. A., Garrison, L. P., Ramsey, S. D., & Burke, W. (2010). A formal risk-benefit framework for genomic tests: facilitating the appropriate translation of genomics into clinical practice. Genetics in Medicine, 12(11), 686-693.

Weymann, D., Pataky, R., & Regier, D. A. (2018). Economic evaluations of next- generation precision oncology: A critical review. JCO Precision Oncology, 2(no pagination). doi:http://dx.doi.org/10.1200/PO.17.00311