

Supplementary Data. Reference/Source of the design and chemistry of oligonucleotide drugs mentioned in this review.

Name	Reference/Source
Formivirsen (Vitravene)	Mulamba, G.B., Hu, A., Azad, R.F., Anderson, K.P. and Coen, D.M., 1998. Human cytomegalovirus mutant with sequence-dependent resistance to the phosphorothioate oligonucleotide fomivirsen (ISIS 2922). <i>Antimicrobial agents and chemotherapy</i> , 42(4), pp.971-973.
Pegaptanib (Macugen)	Ng, E.W., Shima, D.T., Calias, P., Cunningham, E.T., Guyer, D.R. and Adamis, A.P., 2006. Pegaptanib, a targeted anti-VEGF aptamer for ocular vascular disease. <i>Nature reviews drug discovery</i> , 5(2), pp.123-132.
Oblimersen (Genesense)	Rom, J., Von Minckwitz, G., Eiermann, W., Sievert, M., Schlehe, B., Marme, F., Schuetz, F., Scharf, A., Eichbaum, M., Sinn, H.P. and Kaufmann, M., 2008. Oblimersen combined with docetaxel, adriamycin and cyclophosphamide as neo-adjuvant systemic treatment in primary breast cancer: final results of a multicentric phase I study. <i>Annals of oncology</i> , 19(10), pp.1698-1705.
GRN-163L (Imetelstat)	Jackson, S.R., Zhu, C.H., Paulson, V., Watkins, L., Dikmen, Z.G., Gryaznov, S.M., Wright, W.E. and Shay, J.W., 2007. Antiadhesive effects of GRN163L—an oligonucleotide N3'→ P5' thio-phosphoramidate targeting telomerase. <i>Cancer research</i> , 67(3), pp.1121-1129.
Mipomersen (Kynamro)	Geary, R.S., Baker, B.F. and Crooke, S.T., 2015. Clinical and preclinical pharmacokinetics and pharmacodynamics of mipomersen (Kynamro®): a second-generation antisense oligonucleotide inhibitor of apolipoprotein B. <i>Clinical pharmacokinetics</i> , 54(2), pp.133-146.
Inotersen	Inotersen is also called "ISIS 420915" (ISIS-TTR _{Rx}) Rosie, Z.Y., Grundy, J.S., Henry, S.P., Kim, T.W., Norris, D.A., Burkey, J., Wang, Y., Vick, A. and Geary, R.S., 2015. Predictive dose-based estimation of systemic exposure multiples in mouse and monkey relative to human for antisense oligonucleotides with 2'-O-(2-methoxyethyl) modifications. <i>Molecular Therapy-Nucleic Acids</i> , 4, p.e218.
Ionis-HTT _{Rx}	Ionis-HTT _{Rx} is also called "ISIS-443139", which is on page 34 in the patent "MODULATION OF HUNTINGTIN EXPRESSION"
Volanesorsen	http://www.who.int/medicines/publications/druginformation/innlists/RL75.pdf & https://en.wikipedia.org/wiki/Volanesorsen
Drisapersen	https://chem.nlm.nih.gov/chemidplus/rn/1181666-20-5 & https://pubchem.ncbi.nlm.nih.gov/compound/121494117#section=Depositor-Supplied-Synonyms
Eterplirsen (Exondys 51)	https://www.accessdata.fda.gov/drugsatfda_docs/label/2016/206488lbl.pdf & https://en.wikipedia.org/wiki/Eteplirsen
Miravirsen	https://en.wikipedia.org/wiki/Miravirsen & https://chem.nlm.nih.gov/chemidplus/rn/1072874-90-8
Nusinersen (Spinraza)	http://www.ema.europa.eu/docs/en_GB/document_library/EPAR_-_Public_assessment_report/human/004312/WC500229706.pdf & https://www.accessdata.fda.gov/drugsatfda_docs/label/2016/209531lbl.pdf
Patisiran	Patisiran is ALN-18328, https://www.google.com/patents/WO2016033326A2?cl=en & https://chem.nlm.nih.gov/chemidplus/rn/1420706-45-1
Inclisiran	Khvorova, A. (2017). Oligonucleotide therapeutics—a new class of cholesterol-lowering drugs. <i>N Engl J Med</i> , 376(1), 4-7.
RG-012	No public information available
Revusiran	Revusiran is ALN-TTR _{sc} , Fitusiran is ALN-AT3, Givosiran is ALN-AS1, no exact structure and sequence publically available, the best chemistry sketch is from http://www.alnylam.com/web/assets/ALNY-ESC-GalNAC-siRNA-TIDES-May2014-Capella.pdf and http://www.alnylam.com/wp-content/uploads/2017/08/RNAi-Platform-RoundTable_FINAL20170823.pdf
Fitusiran	
Givosiran	