

MD7005/MD7255 - Advanced Injectable Therapies

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[1]

Ajikumar B Aryangat and John E Gerich 2010. Type 2 diabetes: postprandial hyperglycemia and increased cardiovascular risk. *Vascular Health and Risk Management*. 6, (2010).

[2]

Anderson, B. et al. 2005. The art of empowerment: stories and strategies for diabetes educators. American Diabetes Association.

[3]

Ashwell, S.G. et al. 2006. Improved glycaemic control with insulin glargine plus insulin lispro: a multicentre, randomized, cross-over trial in people with Type 1 diabetes. *Diabetic Medicine*. 23, 3 (Mar. 2006), 285-292.

DOI:<https://doi.org/10.1111/j.1464-5491.2005.01781.x>.

[4]

Bergenstal, R.M. et al. 2010. Effectiveness of Sensor-Augmented Insulin-Pump Therapy in Type 1 Diabetes. *New England Journal of Medicine*. 363, 4 (Jul. 2010), 311-320.

DOI:<https://doi.org/10.1056/NEJMoa1002853>.

[5]

Bolinder, J. et al. 2016. Novel glucose-sensing technology and hypoglycaemia in type 1 diabetes: a multicentre, non-masked, randomised controlled trial. *The Lancet*. 388, 10057 (Nov. 2016), 2254-2263. DOI:[https://doi.org/10.1016/S0140-6736\(16\)31535-5](https://doi.org/10.1016/S0140-6736(16)31535-5).

[6]

Bretzel, R.G. et al. 2008. Once-daily basal insulin glargine versus thrice-daily prandial insulin lispro in people with type 2 diabetes on oral hypoglycaemic agents (APOLLO): an open randomised controlled trial. *The Lancet*. 371, 9618 (Mar. 2008), 1073–1084. DOI:[https://doi.org/10.1016/S0140-6736\(08\)60485-7](https://doi.org/10.1016/S0140-6736(08)60485-7).

[7]

Buse, J.B. et al. 2011. Use of Twice-Daily Exenatide in Basal Insulin-Treated Patients With Type 2 Diabetes. *Annals of Internal Medicine*. 154, 2 (Jan. 2011). DOI:<https://doi.org/10.7326/0003-4819-154-2-201101180-00300>.

[8]

Carver, C. 2006. Insulin Treatment and the Problem of Weight Gain in Type 2 Diabetes. *The Diabetes Educator*. 32, 6 (Nov. 2006), 910–917. DOI:<https://doi.org/10.1177/0145721706294259>.

[9]

Crasto, W. et al. 2009. Insulin U-500 in severe insulin resistance in type 2 diabetes mellitus. *Postgraduate Medical Journal*. 85, 1002 (Apr. 2009), 219–222. DOI:<https://doi.org/10.1136/pgmj.2008.073379>.

[10]

Daly, H. et al. 2015. Development of a self-management education module for those with type 2 diabetes on injectable therapies. *Practical Diabetes*. 32, 8 (Oct. 2015), 305–310a. DOI:<https://doi.org/10.1002/pdi.1979>.

[11]

Davies, M. et al. 2005. Improvement of Glycemic Control in Subjects With Poorly Controlled Type 2 Diabetes: Comparison of two treatment algorithms using insulin glargine. *Diabetes Care*. 28, 6 (Jun. 2005), 1282–1288. DOI:<https://doi.org/10.2337/diacare.28.6.1282>.

[12]

Davies, M.J. et al. 2009. Exenatide compared with long-acting insulin to achieve glycaemic

control with minimal weight gain in patients with type 2 diabetes: results of the Helping Evaluate Exenatide in patients with diabetes compared with Long-Acting insulin (HEELA) study. *Diabetes, Obesity and Metabolism*. 11, 12 (Dec. 2009), 1153–1162.
DOI:<https://doi.org/10.1111/j.1463-1326.2009.01154.x>.

[13]

Davies, M.J. et al. 2009. Exenatide compared with long-acting insulin to achieve glycaemic control with minimal weight gain in patients with type 2 diabetes: results of the Helping Evaluate Exenatide in patients with diabetes compared with Long-Acting insulin (HEELA) study. *Diabetes, Obesity and Metabolism*. 11, 12 (Dec. 2009), 1153–1162.
DOI:<https://doi.org/10.1111/j.1463-1326.2009.01154.x>.

[14]

Davies, M.J. et al. 2017. Impact of baseline HbA1c, diabetes duration and BMI on clinical outcomes in the LixiLan-O trial testing iGlarLixi (insulin glargine/lixisenatide titratable fixed-ratio combination) versus insulin glargine and lixisenatide monocomponents. *Diabetes, Obesity and Metabolism*. (Apr. 2017). DOI:<https://doi.org/10.1111/dom.12980>.

[15]

Diamant, M. et al. 2010. Once weekly exenatide compared with insulin glargine titrated to target in patients with type 2 diabetes (DURATION-3): an open-label randomised trial. *The Lancet*. 375, 9733 (Jun. 2010), 2234–2243.
DOI:[https://doi.org/10.1016/S0140-6736\(10\)60406-0](https://doi.org/10.1016/S0140-6736(10)60406-0).

[16]

Evans, M. et al. 2011. A review of modern insulin analogue pharmacokinetic and pharmacodynamic profiles in type 2 diabetes: improvements and limitations. *Diabetes, Obesity and Metabolism*. 13, 8 (Aug. 2011), 677–684.
DOI:<https://doi.org/10.1111/j.1463-1326.2011.01395.x>.

[17]

Frandsen, C.S.S. and Madsbad, S. 2014. Efficacy and safety of dipeptidyl peptidase-4 inhibitors as an add-on to insulin treatment in patients with Type 2 diabetes: a review. *Diabetic Medicine*. 31, 11 (Nov. 2014), 1293–1300.
DOI:<https://doi.org/10.1111/dme.12561>.

[18]

Funnell, M.M. 2007. Overcoming Barriers to the Initiation of Insulin Therapy. *Clinical Diabetes*. 25, 1 (Jan. 2007), 36–38. DOI:<https://doi.org/10.2337/diaclin.25.1.36>.

[19]

Garber, A.J. et al. 2006. Attainment of glycaemic goals in type 2 diabetes with once-, twice-, or thrice-daily dosing with biphasic insulin aspart 70/30 (The 1-2-3 study). *Diabetes, Obesity and Metabolism*. 8, 1 (Jan. 2006), 58–66. DOI:<https://doi.org/10.1111/j.1463-1326.2005.00563.x>.

[20]

Garber, A.J. et al. 2007. Premixed insulin treatment for type 2 diabetes: analogue or human? *Diabetes, Obesity and Metabolism*. 9, 5 (Sep. 2007), 630–639. DOI:<https://doi.org/10.1111/j.1463-1326.2006.00654.x>.

[21]

Gough, S.C.L. 2007. A review of human and analogue insulin trials. *Diabetes Research and Clinical Practice*. 77, 1 (Jul. 2007), 1–15. DOI:<https://doi.org/10.1016/j.diabres.2006.10.015>.

[22]

Gough, S.C.L. et al. 2013. Low-Volume Insulin Degludec 200 Units/mL Once Daily Improves Glycemic Control Similarly to Insulin Glargine With a Low Risk of Hypoglycemia in Insulin-Naïve Patients With Type 2 Diabetes. *Diabetes Care*. 36, 9 (Sep. 2013), 2536–2542. DOI:<https://doi.org/10.2337/dc12-2329>.

[23]

Gururaj Setty, S. et al. 2016. New insulins and newer insulin regimens: a review of their role in improving glycaemic control in patients with diabetes. *Postgraduate Medical Journal*. 92, 1085 (Mar. 2016), 152–164. DOI:<https://doi.org/10.1136/postgradmedj-2015-133716>.

[24]

Gururaj Setty, S. et al. 2016. New insulins and newer insulin regimens: a review of their role in improving glycaemic control in patients with diabetes. *Postgraduate Medical Journal* . 92, 1085 (Mar. 2016), 152–164. DOI:<https://doi.org/10.1136/postgradmedj-2015-133716>.

[25]

Heller, S.R. et al. 2004. Hypoglycaemia with insulin aspart: a double-blind, randomised, crossover trial in subjects with Type 1 diabetes. *Diabetic Medicine*. 21, 7 (Jul. 2004), 769–775. DOI:<https://doi.org/10.1111/j.1464-5491.2004.01244.x>.

[26]

Hermansen, K. et al. 2006. A 26-Week, Randomized, Parallel, Treat-to-Target Trial Comparing Insulin Detemir With NPH Insulin as Add-On Therapy to Oral Glucose-Lowering Drugs in Insulin-Naive People With Type 2 Diabetes. *Diabetes Care*. 29, 6 (Jun. 2006), 1269–1274. DOI:<https://doi.org/10.2337/dc05-1365>.

[27]

Hirsch, I.B. et al. 2014. Options for prandial glucose management in type 2 diabetes patients using basal insulin: addition of a short-acting GLP-1 analogue versus progression to basal-bolus therapy. *Diabetes, Obesity and Metabolism*. 16, 3 (Mar. 2014), 206–214. DOI:<https://doi.org/10.1111/dom.12136>.

[28]

Hirsch, I.B. et al. 2014. Options for prandial glucose management in type 2 diabetes patients using basal insulin: addition of a short-acting GLP-1 analogue versus progression to basal-bolus therapy. *Diabetes, Obesity and Metabolism*. 16, 3 (Mar. 2014), 206–214. DOI:<https://doi.org/10.1111/dom.12136>.

[29]

Hirsch, I.B. et al. 2017. Safety and efficacy of insulin degludec/insulin aspart with bolus mealtime insulin aspart compared with standard basal-bolus treatment in people with Type 1 diabetes: 1-year results from a randomized clinical trial (BOOST T1). *Diabetic Medicine*. 34, 2 (Feb. 2017), 167–173. DOI:<https://doi.org/10.1111/dme.13068>.

[30]

Holman, R.R. et al. 2007. Addition of Biphasic, Prandial, or Basal Insulin to Oral Therapy in Type 2 Diabetes. *New England Journal of Medicine*. 357, 17 (Oct. 2007), 1716–1730. DOI:<https://doi.org/10.1056/NEJMoa075392>.

[31]

Holman, R.R. and Turner, R.C. 1985. A Practical Guide to Basal and Prandial Insulin Therapy. *Diabetic Medicine*. 2, 1 (Jan. 1985), 45–53. DOI:<https://doi.org/10.1111/j.1464-5491.1985.tb00592.x>.

[32]

Home, P.D. 2012. The pharmacokinetics and pharmacodynamics of rapid-acting insulin analogues and their clinical consequences. *Diabetes, Obesity and Metabolism*. 14, 9 (Sep. 2012), 780–788. DOI:<https://doi.org/10.1111/j.1463-1326.2012.01580.x>.

[33]

Horvath, K. et al. 1996. Long-acting insulin analogues versus NPH insulin (human isophane insulin) for type 2 diabetes mellitus. *Cochrane Database of Systematic Reviews*. John Wiley & Sons, Ltd.

[34]

Horvath, K. et al. 1996. Long-acting insulin analogues versus NPH insulin (human isophane insulin) for type 2 diabetes mellitus. *Cochrane Database of Systematic Reviews*. John Wiley & Sons, Ltd.

[35]

Htike, Z.Z. et al. 2017. Efficacy and safety of glucagon-like peptide-1 receptor agonists in type 2 diabetes: A systematic review and mixed-treatment comparison analysis. *Diabetes, Obesity and Metabolism*. (Feb. 2017). DOI:<https://doi.org/10.1111/dom.12849>.

[36]

Inzucchi, S.E. et al. 2015. Management of Hyperglycemia in Type 2 Diabetes, 2015: A Patient-Centered Approach: Update to a Position Statement of the American Diabetes Association and the European Association for the Study of Diabetes. *Diabetes Care*. 38, 1 (Jan. 2015), 140–149. DOI:<https://doi.org/10.2337/dc14-2441>.

[37]

Ismail-Beigi, F. 2012. Glycemic Management of Type 2 Diabetes Mellitus. *New England Journal of Medicine*. 366, 14 (Apr. 2012), 1319–1327. DOI:<https://doi.org/10.1056/NEJMcp1013127>.

[38]

June James Safety and insulin: implementation of national guidance at a local level. *Journal of diabetes nursing*.

[39]

Khunti, K. et al. 2015. Hypoglycemia and Risk of Cardiovascular Disease and All-Cause Mortality in Insulin-Treated People With Type 1 and Type 2 Diabetes: A Cohort Study. *Diabetes Care*. 38, 2 (Feb. 2015), 316–322. DOI:<https://doi.org/10.2337/dc14-0920>.

[40]

L. Luzi 1989. Effect of loss of first-phase insulin secretion on hepatic glucose production and tissue glucose disposal in humans. *American Journal of Physiology - Endocrinology and Metabolism*. 257, 2 (Aug. 1989), E241–E246.

[41]

Leelarathna, L. et al. 2017. Comparison of different insulin pump makes under routine care conditions in adults with Type 1 diabetes. *Diabetic Medicine*. 34, 10 (Oct. 2017), 1372–1379. DOI:<https://doi.org/10.1111/dme.13412>.

[42]

Luc JC van Loon 2000. Plasma insulin responses after ingestion of different amino acid or protein mixtures with carbohydrate. *The American Journal of Clinical Nutrition*. 72, 1 (Jan. 2000), 96–105.

[43]

MacKinnon, M. 2002. Providing diabetes care in general practice: a practical guide to integrated care. Class.

[44]

Mäkimattila, S. et al. 1999. Causes of weight gain during insulin therapy with and without metformin in patients with Type II diabetes mellitus. *Diabetologia*. 42, 4 (Mar. 1999), 406–412. DOI:<https://doi.org/10.1007/s001250051172>.

[45]

Malmberg, K. 1997. Prospective randomised study of intensive insulin treatment on long term survival after acute myocardial infarction in patients with diabetes mellitus. *BMJ*. 314, 7093 (May 1997), 1512–1512. DOI:<https://doi.org/10.1136/bmj.314.7093.1512>.

[46]

Marre, M. et al. 2009. Liraglutide, a once-daily human GLP-1 analogue, added to a sulphonylurea over 26 weeks produces greater improvements in glycaemic and weight control compared with adding rosiglitazone or placebo in subjects with Type 2 diabetes (LEAD-1 SU). *Diabetic Medicine*. 26, 3 (Mar. 2009), 268–278. DOI:<https://doi.org/10.1111/j.1464-5491.2009.02666.x>.

[47]

Marso, S.P. et al. 2017. Efficacy and Safety of Degludec versus Glargine in Type 2 Diabetes. *New England Journal of Medicine*. (Jun. 2017). DOI:<https://doi.org/10.1056/NEJMoa1615692>.

[48]

Menting, J.G. et al. 2013. How insulin engages its primary binding site on the insulin receptor. *Nature*. 493, 7431 (Jan. 2013), 241–245. DOI:<https://doi.org/10.1038/nature11781>.

[49]

Nathan, D.M. et al. 2006. Management of Hyperglycemia in Type 2 Diabetes: A Consensus Algorithm for the Initiation and Adjustment of Therapy: A consensus statement from the American Diabetes Association and the European Association for the Study of Diabetes. *Diabetes Care*. 29, 8 (Aug. 2006), 1963–1972. DOI:<https://doi.org/10.2337/dc06-9912>.

[50]

Nauck, M. 2016. Incretin therapies: highlighting common features and differences in the modes of action of glucagon-like peptide-1 receptor agonists and dipeptidyl peptidase-4 inhibitors. *Diabetes, Obesity and Metabolism*. 18, 3 (Mar. 2016), 203–216. DOI:<https://doi.org/10.1111/dom.12591>.

[51]

New IDegLira data show rapid and predictable glycaemic improvements in people with type 2 diabetes:
<http://www.multivu.com/players/English/72762519-novo-nordisk-IDegLira-treatment/>.

[52]

Pickup, J.C. et al. 2017. Glycemic Control During Continuous Subcutaneous Insulin Infusion Versus Multiple Daily Insulin Injections in Type 2 Diabetes: Individual Patient Data Meta-analysis and Meta-regression of Randomized Controlled Trials. *Diabetes Care*. 40, 5 (May 2017), 715–722. DOI:<https://doi.org/10.2337/dc16-2201>.

[53]

Raccah, D. et al. 2017. Review of basal-plus insulin regimen options for simpler insulin intensification in people with Type 2 diabetes mellitus. *Diabetic Medicine*. (Jun. 2017). DOI:<https://doi.org/10.1111/dme.13390>.

[54]

Raccah, D. et al. 2017. Review of basal-plus insulin regimen options for simpler insulin intensification in people with Type 2 diabetes mellitus. *Diabetic Medicine*. 34, 9 (Sep. 2017), 1193–1204. DOI:<https://doi.org/10.1111/dme.13390>.

[55]

Raskin, P. et al. 2005. Initiating Insulin Therapy in Type 2 Diabetes: A comparison of

biphasic and basal insulin analogs. *Diabetes Care*. 28, 2 (Feb. 2005), 260–265.
DOI:<https://doi.org/10.2337/diacare.28.2.260>.

[56]

Reduced weight gain with insulin detemir compared to NPH insulin is not explained by a reduction in hypoglycemia. - PubMed - NCBI:
<http://www.ncbi.nlm.nih.gov/pubmed/18715200>.

[57]

Richard I. G. Holt, , Clive Cockram, , Allan Flyvbjerg, , and Barry J. Goldstein 2016.
Textbook of Diabetes. John Wiley & Sons, Incorporated.

[58]

Richter, B. and Neises, G. 1996. 'Human' insulin versus animal insulin in people with diabetes mellitus. *Cochrane Database of Systematic Reviews*. John Wiley & Sons, Ltd.

[59]

Riddle, M.C. et al. 2013. Adding Once-Daily Lixisenatide for Type 2 Diabetes Inadequately Controlled by Established Basal Insulin. *Diabetes Care*. 36, 9 (Sep. 2013), 2489–2496.
DOI:<https://doi.org/10.2337/dc12-2454>.

[60]

Rodbard, H.W. et al. 2017. Safety and efficacy of insulin degludec/liraglutide (IDegLira) added to sulphonylurea alone or to sulphonylurea and metformin in insulin-naïve people with Type 2 diabetes: the DUAL IV trial. *Diabetic Medicine*. 34, 2 (Feb. 2017), 189–196.
DOI:<https://doi.org/10.1111/dme.13256>.

[61]

Rorsman, P. and Renström, E. 2003. Insulin granule dynamics in pancreatic beta cells. *Diabetologia*. 46, 8 (Aug. 2003), 1029–1045.
DOI:<https://doi.org/10.1007/s00125-003-1153-1>.

[62]

Rosenstock, J. et al. 2008. A randomised, 52-week, treat-to-target trial comparing insulin detemir with insulin glargine when administered as add-on to glucose-lowering drugs in insulin-naive people with type 2 diabetes. *Diabetologia*. 51, 3 (Mar. 2008), 408–416. DOI:<https://doi.org/10.1007/s00125-007-0911-x>.

[63]

Rosenstock, J. et al. 2013. Efficacy and Safety of Lixisenatide Once Daily Versus Exenatide Twice Daily in Type 2 Diabetes Inadequately Controlled on Metformin: A 24-week, randomized, open-label, active-controlled study (GetGoal-X). *Diabetes Care*. 36, 10 (Oct. 2013), 2945–2951. DOI:<https://doi.org/10.2337/dc12-2709>.

[64]

Rosenstock, J. et al. 2014. Improved Glucose Control With Weight Loss, Lower Insulin Doses, and No Increased Hypoglycemia With Empagliflozin Added to Titrated Multiple Daily Injections of Insulin in Obese Inadequately Controlled Type 2 Diabetes. *Diabetes Care*. 37, 7 (Jul. 2014), 1815–1823. DOI:<https://doi.org/10.2337/dc13-3055>.

[65]

Sharon Allard, Caroline Butler, Sue Cradock, Heather Daly, Jemma Edwards, Elizabeth Gilbert 2010. Using Conversation Maps in practice: the UK experience. *Journal of Diabetes Nursing*. 14, 1 (2010).

[66]

Srinivasan, B.T. et al. 2008. Recent advances in the management of type 2 diabetes mellitus: a review. *Postgraduate Medical Journal*. 84, 996 (Oct. 2008), 524–531. DOI:<https://doi.org/10.1136/pgmj.2008.067918>.

[67]

Srinivasan, B.T. and Davies, M. 2014. Glycaemic management of type 2 diabetes. *Medicine*. 42, 12 (Dec. 2014), 711–717. DOI:<https://doi.org/10.1016/j.mpmed.2014.09.011>.

[68]

Swinnen, S.G. et al. 1996. Insulin detemir versus insulin glargine for type 2 diabetes mellitus. *Cochrane Database of Systematic Reviews*. John Wiley & Sons, Ltd.

[69]

Villani, M. et al. 2017. Emergency treatment of hypoglycaemia: a guideline and evidence review. *Diabetic Medicine*. 34, 9 (Sep. 2017), 1205–1211.
DOI:<https://doi.org/10.1111/dme.13379>.

[70]

Wahren, J. and Kallas, A. 2012. Loss of Pulsatile Insulin Secretion: A Factor in the Pathogenesis of Type 2 Diabetes? *Diabetes*. 61, 9 (Sep. 2012), 2228–2229.
DOI:<https://doi.org/10.2337/db12-0664>.

[71]

Walker, R.A. et al. 2010. *Diabetes: a practical guide to managing your health*. Dorling Kindersley.

[72]

Wang, W. et al. 2017. Effects of Insulin Plus Glucagon-Like Peptide-1 Receptor Agonists (GLP-1RAs) in Treating Type 1 Diabetes Mellitus: A Systematic Review and Meta-Analysis. *Diabetes Therapy*. (Jun. 2017). DOI:<https://doi.org/10.1007/s13300-017-0282-3>.

[73]

Yki-Järvinen, H. et al. 2006. Insulin glargine or NPH combined with metformin in type 2 diabetes: the LANMET study. *Diabetologia*. 49, 3 (Mar. 2006), 442–451.
DOI:<https://doi.org/10.1007/s00125-005-0132-0>.

[74]

Young, L.A. and Buse, J.B. 2014. GLP-1 receptor agonists and basal insulin in type 2 diabetes. *The Lancet*. 384, 9961 (Dec. 2014), 2180–2181.
DOI:[https://doi.org/10.1016/S0140-6736\(14\)61409-4](https://doi.org/10.1016/S0140-6736(14)61409-4).

[75]

Zinman, B. et al. 2011. Insulin degludec, an ultra-long-acting basal insulin, once a day or three times a week versus insulin glargine once a day in patients with type 2 diabetes: a 16-week, randomised, open-label, phase 2 trial. *The Lancet*. 377, 9769 (Mar. 2011), 924–931. DOI:[https://doi.org/10.1016/S0140-6736\(10\)62305-7](https://doi.org/10.1016/S0140-6736(10)62305-7).

[76]

4AD. Professor Kamlesh Khunti - Coding, Classification and Diagnosis of Diabetes.