

# MD7511Advanced Injectable Therapies

Injectable Therapies

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[1]

'Type 2 Diabetes Therapies and Management : an Educational Toolkit'. [Online]. Available: [https://blackboard.le.ac.uk/bbcswebdav/courses/MB7501/UHL\\_LDC\\_Leicester\\_Diabetes\\_Type2\\_Therapies\\_3rd\\_Ed\\_23July2018.pdf](https://blackboard.le.ac.uk/bbcswebdav/courses/MB7501/UHL_LDC_Leicester_Diabetes_Type2_Therapies_3rd_Ed_23July2018.pdf)

[2]

'Insulin Therapies: An Educational Toolkit'. [Online]. Available: [https://blackboard.le.ac.uk/bbcswebdav/courses/MB7501/UHL\\_LDC\\_Leicester\\_Insulin\\_Therapies\\_3rd\\_Ed\\_16July2018\\_F.pdf](https://blackboard.le.ac.uk/bbcswebdav/courses/MB7501/UHL_LDC_Leicester_Insulin_Therapies_3rd_Ed_16July2018_F.pdf)

[3]

R. I. G. Holt, C. Cockram, A. Flyvbjerg, and B. J. Goldstein, Textbook of Diabetes, 5th ed. Somerset: John Wiley & Sons, Incorporated, 2016 [Online]. Available: <http://ebookcentral.proquest.com/lib/leicester/detail.action?docID=4769056>

[4]

R. I. G. Holt, Textbook of diabetes, 4th ed. Chichester: Wiley-Blackwell, 2010 [Online]. Available: <http://ezproxy.lib.le.ac.uk/login?url=http://www.myilibrary.com?id=269077>

[5]

Crasto, W., Handbook of Insulin Therapies. Adis; 1st ed. 2016 edition, 2016 [Online]. Available: <https://ebookcentral.proquest.com/lib/leicester/detail.action?docID=4676975>

[6]

'Efficacy and Safety of Glucagon-like peptide-1 receptor agonists in type 2 diabetes Systematic review and mixed-treatment comparison analysis' [Online]. Available: <http://onlinelibrary.wiley.com.ezproxy3.lib.le.ac.uk/doi/10.1111/dom.12849/epdf>

[7]

R. I. G. Holt, C. Cockram, A. Flyvbjerg, and B. J. Goldstein, Textbook of Diabetes, 5th ed. Somerset: John Wiley & Sons, Incorporated, 2016 [Online]. Available: <http://ebookcentral.proquest.com/lib/leicester/detail.action?docID=4769056>

[8]

R. I. G. Holt, Textbook of diabetes, 4th ed. Chichester: Wiley-Blackwell, 2010 [Online]. Available: <http://ezproxy.lib.le.ac.uk/login?url=http://www.myilibrary.com?id=269077>

[9]

M. Evans, P. M. Schumm-Draeger, J. Vora, and A. B. King, 'A review of modern insulin analogue pharmacokinetic and pharmacodynamic profiles in type 2 diabetes: improvements and limitations', Diabetes, Obesity and Metabolism, vol. 13, no. 8, pp. 677-684, Aug. 2011, doi: 10.1111/j.1463-1326.2011.01395.x.

[10]

M. Nauck, '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, vol. 18, no. 3, pp. 203-216, Mar. 2016, doi: 10.1111/dom.12591.

[11]

F. Ismail-Beigi, 'Glycemic Management of Type 2 Diabetes Mellitus', New England Journal of Medicine, vol. 366, no. 14, pp. 1319-1327, Apr. 2012, doi: 10.1056/NEJMcp1013127.

[12]

D. M. Nathan et al., '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*, vol. 29, no. 8, pp. 1963-1972, Aug. 2006, doi: 10.2337/dc06-9912.

[13]

B. T. Srinivasan and M. Davies, 'Glycaemic management of type 2 diabetes', *Medicine*, vol. 42, no. 12, pp. 711-717, Dec. 2014, doi: 10.1016/j.mpmed.2014.09.011.

[14]

B. T. Srinivasan, J. Jarvis, K. Khunti, and M. J. Davies, 'Recent advances in the management of type 2 diabetes mellitus: a review', *Postgraduate Medical Journal*, vol. 84, no. 996, pp. 524-531, Oct. 2008, doi: 10.1136/pgmj.2008.067918.

[15]

P. D. Home, 'The pharmacokinetics and pharmacodynamics of rapid-acting insulin analogues and their clinical consequences', *Diabetes, Obesity and Metabolism*, vol. 14, no. 9, pp. 780-788, Sep. 2012, doi: 10.1111/j.1463-1326.2012.01580.x.

[16]

June James, 'Safety and insulin: implementation of national guidance at a local level', *Journal of Diabetes Nursing* [Online]. Available: [http://go.galegroup.com.ezproxy4.lib.le.ac.uk/ps/retrieve.do?tabID=T002&resultListType=RESULT\\_LIST&searchResultsType=SingleTab&searchType=AdvancedSearchForm&currentPosition=8&docId=GALE%7CA342482979&docType=Article&sort=RELEVANCE&contentSegment=&prodId=EAIM&contentSet=GAL E%7CA342482979&searchId=R6&userGroupName=leicester&inPS=true](http://go.galegroup.com.ezproxy4.lib.le.ac.uk/ps/retrieve.do?tabID=T002&resultListType=RESULT_LIST&searchResultsType=SingleTab&searchType=AdvancedSearchForm&currentPosition=8&docId=GALE%7CA342482979&docType=Article&sort=RELEVANCE&contentSegment=&prodId=EAIM&contentSet=GAL E%7CA342482979&searchId=R6&userGroupName=leicester&inPS=true)

[17]

P. Rorsman and E. Renström, 'Insulin granule dynamics in pancreatic beta cells', *Diabetologia*, vol. 46, no. 8, pp. 1029-1045, Aug. 2003, doi: 10.1007/s00125-003-1153-1.

[18]

L. Luzi, '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*, vol. 257, no. 2, pp. E241–E246, Aug. 1989 [Online]. Available: <http://ajpendo.physiology.org.ezproxy4.lib.le.ac.uk/content/257/2/E241>

[19]

Luc JC van Loon, 'Plasma insulin responses after ingestion of different amino acid or protein mixtures with carbohydrate', *The American Journal of Clinical Nutrition*, vol. 72, no. 1, pp. 96–105, Jan. 2000 [Online]. Available: <http://ajcn.nutrition.org/content/72/1/96.full>

[20]

J. G. Menting et al., 'How insulin engages its primary binding site on the insulin receptor', *Nature*, vol. 493, no. 7431, pp. 241–245, Jan. 2013, doi: 10.1038/nature11781.

[21]

J. Wahren and A. Kallas, 'Loss of Pulsatile Insulin Secretion: A Factor in the Pathogenesis of Type 2 Diabetes?', *Diabetes*, vol. 61, no. 9, pp. 2228–2229, Sep. 2012, doi: 10.2337/db12-0664.

[22]

'Professor Kamlesh Khunti - Coding, Classification and Diagnosis of Diabetes'. 4AD [Online]. Available: <https://www.youtube.com/watch?v=AhhWTmEFuag>

[23]

K. Hermansen, M. Davies, T. Derezinski, G. Martinez Ravn, P. Clauson, and P. Home, '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*, vol. 29, no. 6, pp. 1269–1274, Jun. 2006, doi: 10.2337/dc05-1365.

[24]

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

Ltd, 1996 [Online]. Available: <http://doi.wiley.com/10.1002/14651858.CD003816.pub2>

[25]

R. R. Holman and R. C. Turner, 'A Practical Guide to Basal and Prandial Insulin Therapy', *Diabetic Medicine*, vol. 2, no. 1, pp. 45–53, Jan. 1985, doi: 10.1111/j.1464-5491.1985.tb00592.x.

[26]

Crasto, W., *Handbook of Insulin Therapies*. Adis; 1st ed. 2016 edition, 2016 [Online]. Available: <https://ebookcentral.proquest.com/lib/leicester/detail.action?docID=4676975>

[27]

W. Crasto et al., 'Insulin U-500 in severe insulin resistance in type 2 diabetes mellitus', *Postgraduate Medical Journal*, vol. 85, no. 1002, pp. 219–222, Apr. 2009, doi: 10.1136/pgmj.2008.073379.

[28]

S. G. Swinnen, A. C. Simon, F. Holleman, J. B. Hoekstra, and J. H. DeVries, 'Insulin detemir versus insulin glargine for type 2 diabetes mellitus', in *Cochrane Database of Systematic Reviews*, Chichester, UK: John Wiley & Sons, Ltd, 1996 [Online]. Available: <http://doi.wiley.com/10.1002/14651858.CD006383.pub2>

[29]

R. G. Bretzel, U. Nuber, W. Landgraf, D. R. Owens, C. Bradley, and T. Linn, '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*, vol. 371, no. 9618, pp. 1073–1084, Mar. 2008, doi: 10.1016/S0140-6736(08)60485-7.

[30]

M. J. Davies, R. Donnelly, A. H. Barnett, S. Jones, C. Nicolay, and A. Kilcoyne, '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*, vol. 11, no. 12, pp. 1153–1162, Dec. 2009, doi: 10.1111/j.1463-1326.2009.01154.x.

[31]

A. J. Garber, R. Ligthelm, J. S. Christiansen, and A. Liebl, 'Premixed insulin treatment for type 2 diabetes: analogue or human?', *Diabetes, Obesity and Metabolism*, vol. 9, no. 5, pp. 630–639, Sep. 2007, doi: 10.1111/j.1463-1326.2006.00654.x.

[32]

R. R. Holman et al., 'Addition of Biphasic, Prandial, or Basal Insulin to Oral Therapy in Type 2 Diabetes', *New England Journal of Medicine*, vol. 357, no. 17, pp. 1716–1730, Oct. 2007, doi: 10.1056/NEJMoa075392.

[33]

K. Horvath et al., 'Long-acting insulin analogues versus NPH insulin (human isophane insulin) for type 2 diabetes mellitus', in *Cochrane Database of Systematic Reviews*, Chichester, UK: John Wiley & Sons, Ltd, 1996 [Online]. Available: <http://doi.wiley.com/10.1002/14651858.CD005613.pub3>

[34]

'Insulin glargine or NPH combined with metformin in type 2 diabetes: the LANMET study'. [Online]. Available: <http://link.springer.com.ezproxy4.lib.le.ac.uk/article/10.1007/s00125-005-0132-0/fulltext.html>

[35]

M. C. Riddle et al., 'Adding Once-Daily Lixisenatide for Type 2 Diabetes Inadequately Controlled by Established Basal Insulin: A 24-week, randomized, placebo-controlled comparison (GetGoal-L)', *Diabetes Care*, vol. 36, no. 9, pp. 2489–2496, Sep. 2013, doi: 10.2337/dc12-2454.

[36]

S. C. L. Gough, A. Bhargava, R. Jain, H. Mersebach, S. Rasmussen, and R. M. Bergenstal,

'Low-Volume Insulin Degludec 200 Units/mL Once Daily Improves Glycemic Control Similarly to Insulin Glargine With a Low Risk of Hypoglycemia in Insulin-Naive Patients With Type 2 Diabetes: A 26-week, randomized, controlled, multinational, treat-to-target trial: The BEGIN LOW VOLUME trial', *Diabetes Care*, vol. 36, no. 9, pp. 2536–2542, Sep. 2013, doi: 10.2337/dc12-2329.

[37]

I. B. Hirsch et al., '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*, vol. 16, no. 3, pp. 206–214, Mar. 2014, doi: 10.1111/dom.12136.

[38]

B. Zinman et al., '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*, vol. 377, no. 9769, pp. 924–931, Mar. 2011, doi: 10.1016/S0140-6736(10)62305-7.

[39]

L. A. Young and J. B. Buse, 'GLP-1 receptor agonists and basal insulin in type 2 diabetes', *The Lancet*, vol. 384, no. 9961, pp. 2180–2181, Dec. 2014, doi: 10.1016/S0140-6736(14)61409-4.

[40]

J. Rosenstock et al., '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*, vol. 36, no. 10, pp. 2945–2951, Oct. 2013, doi: 10.2337/dc12-2709.

[41]

M. Diamant et al., '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*, vol. 375, no. 9733, pp. 2234–2243, Jun. 2010, doi: 10.1016/S0140-6736(10)60406-0.

[42]

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

[43]

K. Horvath et al., 'Long-acting insulin analogues versus NPH insulin (human isophane insulin) for type 2 diabetes mellitus', in *Cochrane Database of Systematic Reviews*, Chichester, UK: John Wiley & Sons, Ltd, 1996 [Online]. Available: <http://doi.wiley.com/10.1002/14651858.CD005613.pub3>

[44]

J. B. Buse et al., 'Use of Twice-Daily Exenatide in Basal Insulin-Treated Patients With Type 2 Diabetes', *Annals of Internal Medicine*, vol. 154, no. 2, Jan. 2011, doi: 10.7326/0003-4819-154-2-201101180-00300.

[45]

J. Rosenstock et al., '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*, vol. 37, no. 7, pp. 1815–1823, Jul. 2014, doi: 10.2337/dc13-3055.

[46]

C. S. S. Frandsen and S. Madsbad, '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*, vol. 31, no. 11, pp. 1293–1300, Nov. 2014, doi: 10.1111/dme.12561.

[47]

I. B. Hirsch, E. Franek, H. Mersebach, L. Bardtrum, and K. Hermansen, '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*, vol. 34, no. 2, pp. 167–173, Feb. 2017, doi: 10.1111/dme.13068.

[48]



H. W. Rodbard et al., '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*, vol. 34, no. 2, pp. 189–196, Feb. 2017, doi: 10.1111/dme.13256.

[49]

M. J. Davies et al., '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: 10.1111/dom.12980.

[50]

D. Raccach et al., 'Review of basal-plus insulin regimen options for simpler insulin intensification in people with Type 2 diabetes mellitus', *Diabetic Medicine*, Jun. 2017, doi: 10.1111/dme.13390.

[51]

H. Daly et al., 'Development of a self-management education module for those with type 2 diabetes on injectable therapies', *Practical Diabetes*, vol. 32, no. 8, pp. 305–310a, Oct. 2015, doi: 10.1002/pdi.1979.

[52]

Crasto, W., *Handbook of Insulin Therapies*. Adis; 1st ed. 2016 edition, 2016 [Online]. Available: <https://ebookcentral.proquest.com/lib/leicester/detail.action?docID=4676975>

[53]

'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-naïve people with type 2 diabetes'. [Online]. Available: <http://link.springer.com.ezproxy4.lib.le.ac.uk/article/10.1007/s00125-007-0911-x/fulltext.html>

[54]

Hannele Yki-Jarvinen, Leena Juurinen, Michael Alvarsson, Tord Bystedt, Ian Caldwell, Melanie Davies, 'Initiate insulin by aggressive titration and education (Initiate): randomized study to compare initiation of insulin combination therapy in type 2 diabetic patients individually and in groups', *Diabetes Care* [Online]. Available:

[http://go.galegroup.com.ezproxy4.lib.le.ac.uk/ps/retrieve.do?sort=DA-SORT&docType=Clinical+report&tabID=T002&prodId=EAIM&searchId=R1&resultListType=RESULT\\_LIST&searchType=AdvancedSearchForm&contentSegment=&currentPosition=5&searchResultsType=SingleTab&inPS=true&userGroupName=leicester&docId=GALE%7CA165017903&contentSet=GALE%7CA165017903](http://go.galegroup.com.ezproxy4.lib.le.ac.uk/ps/retrieve.do?sort=DA-SORT&docType=Clinical+report&tabID=T002&prodId=EAIM&searchId=R1&resultListType=RESULT_LIST&searchType=AdvancedSearchForm&contentSegment=&currentPosition=5&searchResultsType=SingleTab&inPS=true&userGroupName=leicester&docId=GALE%7CA165017903&contentSet=GALE%7CA165017903)

[55]

Philip Raskin, Elsie Allen, Priscilla Hollander, Andrew Lewin, Robert A. Gabbay, Peter Hu, 'Initiating insulin therapy in type 2 diabetes: a comparison of biphasic and basal insulin analogs', *Diabetes Care* [Online]. Available:

[http://go.galegroup.com.ezproxy4.lib.le.ac.uk/ps/retrieve.do?sort=DA-SORT&docType=Article&tabID=T002&prodId=EAIM&searchId=R5&resultListType=RESULT\\_LIST&searchType=AdvancedSearchForm&contentSegment=&currentPosition=5&searchResultsType=SingleTab&inPS=true&userGroupName=leicester&docId=GALE%7CA128867472&contentSet=GALE%7CA128867472](http://go.galegroup.com.ezproxy4.lib.le.ac.uk/ps/retrieve.do?sort=DA-SORT&docType=Article&tabID=T002&prodId=EAIM&searchId=R5&resultListType=RESULT_LIST&searchType=AdvancedSearchForm&contentSegment=&currentPosition=5&searchResultsType=SingleTab&inPS=true&userGroupName=leicester&docId=GALE%7CA128867472&contentSet=GALE%7CA128867472)

[56]

R. R. Holman, S. K. Paul, M. A. Bethel, D. R. Matthews, and H. A. W. Neil, '10-Year Follow-up of Intensive Glucose Control in Type 2 Diabetes', *New England Journal of Medicine*, vol. 359, no. 15, pp. 1577–1589, Oct. 2008, doi: 10.1056/NEJMoa0806470.

[57]

'Basal Insulin and Cardiovascular and Other Outcomes in Dysglycemia', *New England Journal of Medicine*, vol. 367, no. 4, pp. 319–328, Jul. 2012, doi: 10.1056/NEJMoa1203858.

[58]

A. N. Goudswaard, N. J. Furlong, G. D. Valk, R. P. Stolk, and G. E. Rutten, 'Insulin monotherapy versus combinations of insulin with oral hypoglycaemic agents in patients with type 2 diabetes mellitus', in *Cochrane Database of Systematic Reviews*, Chichester, UK: John Wiley & Sons, Ltd, 1996 [Online]. Available:

<http://doi.wiley.com/10.1002/14651858.CD003418.pub2>

[59]

C. K. Kramer, B. Zinman, and R. Retnakaran, 'Short-term intensive insulin therapy in type 2 diabetes mellitus: a systematic review and meta-analysis', *The Lancet Diabetes & Endocrinology*, vol. 1, no. 1, pp. 28–34, Sep. 2013, doi: 10.1016/S2213-8587(13)70006-8.

[60]

R. R. Holman et al., 'Three-Year Efficacy of Complex Insulin Regimens in Type 2 Diabetes', *New England Journal of Medicine*, vol. 361, no. 18, pp. 1736–1747, Oct. 2009, doi: 10.1056/NEJMoa0905479.

[61]

H. Yki-Jarvinen et al., 'Initiate Insulin by Aggressive Titration and Education (INITIATE): A randomized study to compare initiation of insulin combination therapy in type 2 diabetic patients individually and in groups', *Diabetes Care*, vol. 30, no. 6, pp. 1364–1369, Jun. 2007, doi: 10.2337/dc06-1357.

[62]

M. Davies, F. Storms, S. Shutler, M. Bianchi-Biscay, and R. Gomis, 'Improvement of Glycemic Control in Subjects With Poorly Controlled Type 2 Diabetes: Comparison of two treatment algorithms using insulin glargine', *Diabetes Care*, vol. 28, no. 6, pp. 1282–1288, Jun. 2005, doi: 10.2337/diacare.28.6.1282.

[63]

C. Eng, C. K. Kramer, B. Zinman, and R. Retnakaran, 'Glucagon-like peptide-1 receptor agonist and basal insulin combination treatment for the management of type 2 diabetes: a systematic review and meta-analysis', *The Lancet*, vol. 384, no. 9961, pp. 2228–2234, Dec. 2014, doi: 10.1016/S0140-6736(14)61335-0.

[64]

H. Yki-Jarvinen and A. Kotronen, 'Is There Evidence to Support Use of Premixed or Prandial Insulin Regimens in Insulin-Naive or Previously Insulin-Treated Type 2 Diabetic Patients?', *Diabetes Care*, vol. 36, no. Supplement\_2, pp. S205–S211, Aug. 2013, doi: 10.2337/dcS13-2026.

[65]

D. S. Lasserson, P. Glasziou, R. Perera, R. R. Holman, and A. J. Farmer, 'Optimal insulin regimens in type 2 diabetes mellitus: systematic review and meta-analyses', *Diabetologia*, vol. 52, no. 10, pp. 1990–2000, Oct. 2009, doi: 10.1007/s00125-009-1468-7.

[66]

C. Wang, J. Mamza, and I. Idris, 'Biphasic vs basal bolus insulin regimen in Type 2 diabetes: a systematic review and meta-analysis of randomized controlled trials', *Diabetic Medicine*, vol. 32, no. 5, pp. 585–594, May 2015, doi: 10.1111/dme.12694.

[67]

M. J. Davies and S. Chatterjee, 'Trial watch: Insulin initiation for type 2 diabetes mellitus in primary care', *Nature Reviews Endocrinology*, vol. 13, no. 6, pp. 317–318, Apr. 2017, doi: 10.1038/nrendo.2017.41.

[68]

'Clinical effectiveness and cost-effectiveness of continuous subcutaneous insulin infusion for diabetes: systematic review and economic evaluation' [Online]. Available: <http://www.journalslibrary.nihr.ac.uk/hta/volume-14/issue-11>

[69]

Crasto, W., *Handbook of Insulin Therapies*. Adis; 1st ed. 2016 edition, 2016 [Online]. Available: <https://ebookcentral.proquest.com/lib/leicester/detail.action?docID=4676975>

[70]

S. Heller et al., 'Insulin degludec, an ultra-longacting basal insulin, versus insulin glargine in basal-bolus treatment with mealtime insulin aspart in type 1 diabetes (BEGIN Basal-Bolus Type 1): a phase 3, randomised, open-label, treat-to-target non-inferiority trial', *The Lancet*, vol. 379, no. 9825, pp. 1489–1497, Apr. 2012, doi: 10.1016/S0140-6736(12)60204-9.

[71]

M. J. Davies et al., 'Efficacy and safety of insulin degludec given as part of basal-bolus treatment with mealtime insulin aspart in type 1 diabetes: a 26-week randomized, open-label, treat-to-target non-inferiority trial', *Diabetes, Obesity and Metabolism*, vol. 16, no. 10, pp. 922–930, Oct. 2014, doi: 10.1111/dom.12298.

[72]

S. G. Ashwell et al., 'Improved glycaemic control with insulin glargine plus insulin lispro: a multicentre, randomized, cross-over trial in people with Type 1 diabetes', *Diabetic Medicine*, vol. 23, no. 3, pp. 285–292, Mar. 2006, doi: 10.1111/j.1464-5491.2005.01781.x.

[73]

'The Effect of Intensive Treatment of Diabetes on the Development and Progression of Long-Term Complications in Insulin-Dependent Diabetes Mellitus', *New England Journal of Medicine*, vol. 329, no. 14, pp. 977–986, Sep. 1993, doi: 10.1056/NEJM199309303291401.

[74]

D. M. Nathan, 'The Diabetes Control and Complications Trial/Epidemiology of Diabetes Interventions and Complications Study at 30 Years: Overview', *Diabetes Care*, vol. 37, no. 1, pp. 9–16, Jan. 2014, doi: 10.2337/dc13-2112.

[75]

R. M. Bergenstal et al., 'Effectiveness of Sensor-Augmented Insulin-Pump Therapy in Type 1 Diabetes', *New England Journal of Medicine*, vol. 363, no. 4, pp. 311–320, Jul. 2010, doi: 10.1056/NEJMoa1002853.

[76]

P. Kahler et al., 'Targeting intensive versus conventional glycaemic control for type 1 diabetes mellitus: a systematic review with meta-analyses and trial sequential analyses of randomised clinical trials', *BMJ Open*, vol. 4, no. 8, pp. e004806–e004806, Aug. 2014, doi: 10.1136/bmjopen-2014-004806.

[77]

B. Fullerton, K. Jeitler, M. Seitz, K. Horvath, A. Berghold, and A. Siebenhofer, 'Intensive glucose control versus conventional glucose control for type 1 diabetes mellitus', in Cochrane Database of Systematic Reviews, Chichester, UK: John Wiley & Sons, Ltd, 1996 [Online]. Available: <http://doi.wiley.com/10.1002/14651858.CD009122.pub2>

[78]

K. Benkhadra et al., 'Real Time Continuous Glucose Monitoring in type 1 diabetes: A Systematic review and Individual Patient Data Meta-Analysis', *Clinical Endocrinology*, Dec. 2016, doi: 10.1111/cen.13290.

[79]

R. J. McCrimmon, 'Old habits are hard to break: lessons from the study of hypoglycaemia', *Diabetic Medicine*, vol. 34, no. 2, pp. 148–155, Feb. 2017, doi: 10.1111/dme.13277.

[80]

S. R. Heller et al., 'Hypoglycaemia with insulin aspart: a double-blind, randomised, crossover trial in subjects with Type 1 diabetes', *Diabetic Medicine*, vol. 21, no. 7, pp. 769–775, Jul. 2004, doi: 10.1111/j.1464-5491.2004.01244.x.

[81]

J. C. Pickup, Y. Reznik, and A. J. Sutton, '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*, vol. 40, no. 5, pp. 715–722, May 2017, doi: 10.2337/dc16-2201.

[82]

W. Wang, H. Liu, S. Xiao, S. Liu, X. Li, and P. Yu, '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: 10.1007/s13300-017-0282-3.

[83]

M. Villani, B. de Courten, and S. Zoungas, 'Emergency treatment of hypoglycaemia: a guideline and evidence review', *Diabetic Medicine*, vol. 34, no. 9, pp. 1205–1211, Sep.

2017, doi: 10.1111/dme.13379.

[84]

R. A. Walker, J. Rodgers, and Diabetes UK., *Diabetes: a practical guide to managing your health*, Fully revised and Updated. London: Dorling Kindersley, 2010.

[85]

R. R. Holman et al., 'Three-Year Efficacy of Complex Insulin Regimens in Type 2 Diabetes', *New England Journal of Medicine*, vol. 361, no. 18, pp. 1736–1747, Oct. 2009, doi: 10.1056/NEJMoa0905479.

[86]

K. Hermansen and M. Davies, 'Does insulin detemir have a role in reducing risk of insulin-associated weight gain?', *Diabetes, Obesity and Metabolism*, vol. 9, no. 3, pp. 209–217, May 2007, doi: 10.1111/j.1463-1326.2006.00665.x.

[87]

J. W. Anderson, C. W. C. Kendall, and D. J. A. Jenkins, 'Importance of Weight Management in Type 2 Diabetes: Review with Meta-analysis of Clinical Studies', *Journal of the American College of Nutrition*, vol. 22, no. 5, pp. 331–339, Oct. 2003, doi: 10.1080/07315724.2003.10719316.

[88]

D. Russell-Jones and R. Khan, 'Insulin-associated weight gain in diabetes – causes, effects and coping strategies', *Diabetes, Obesity and Metabolism*, vol. 9, no. 6, pp. 799–812, Nov. 2007, doi: 10.1111/j.1463-1326.2006.00686.x.

[89]

'Training in flexible, intensive insulin management to enable dietary freedom in people with type 1 diabetes: dose adjustment for normal eating (DAFNE) randomised controlled trial', *BMJ*, vol. 325, no. 7367, pp. 746–746, Oct. 2002, doi: 10.1136/bmj.325.7367.746.

[90]

B. Anderson, M. Funnell, and American Diabetes Association, *The art of empowerment: stories and strategies for diabetes educators*, 2nd ed. Alexandria, Va: American Diabetes Association, 2005.

[91]

'Insulin treatment and the problem of weight gain in type 2 diabetes. - PubMed - NCBI'. [Online]. Available: <http://www.ncbi.nlm.nih.gov/pubmed/17102158>

[92]

H. Tikkanen-Dolenc et al., 'Frequent and intensive physical activity reduces risk of cardiovascular events in type 1 diabetes', *Diabetologia*, Dec. 2016, doi: 10.1007/s00125-016-4189-8.

[93]

Peter Mansell, 'The dose adjustment for normal eating (DAFNE) education programme', *Journal of Diabetes Nursing* [Online]. Available: [http://go.galegroup.com.ezproxy4.lib.le.ac.uk/ps/retrieve.do?tabID=T002&resultListType=RESULT\\_LIST&searchResultsType=SingleTab&searchType=AdvancedSearchForm&currentPosition=1&docId=GALE%7CA314268073&docType=Article&sort=Relevance&contentSegment=&prodId=EAIM&contentSet=GALE%7CA314268073&searchId=R1&userGroupName=leicester&inPS=true](http://go.galegroup.com.ezproxy4.lib.le.ac.uk/ps/retrieve.do?tabID=T002&resultListType=RESULT_LIST&searchResultsType=SingleTab&searchType=AdvancedSearchForm&currentPosition=1&docId=GALE%7CA314268073&docType=Article&sort=Relevance&contentSegment=&prodId=EAIM&contentSet=GALE%7CA314268073&searchId=R1&userGroupName=leicester&inPS=true)

[94]:

'Summary of Revisions', *Diabetes Care*, vol. 39, no. Supplement 1, pp. S4-S5, Jan. 2016, doi: 10.2337/dc16-S003.

[95]

'Effects of Intensive Glucose Lowering in Type 2 Diabetes', *New England Journal of Medicine*, vol. 358, no. 24, pp. 2545-2559, Jun. 2008, doi: 10.1056/NEJMoa0802743.

[96]

A. J. Garber et al., '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*, vol. 8, no. 1, pp. 58–66, Jan. 2006, doi: 10.1111/j.1463-1326.2005.00563.x.

[97]

D. R. Owens, 'Stepwise intensification of insulin therapy in Type 2 diabetes management-exploring the concept of the basal-plus approach in clinical practice', *Diabetic Medicine*, vol. 30, no. 3, pp. 276–288, Mar. 2013, doi: 10.1111/dme.12019.

[98]

M. Davies, F. Storms, S. Shutler, M. Bianchi-Biscay, and R. Gomis, 'Improvement of Glycemic Control in Subjects With Poorly Controlled Type 2 Diabetes: Comparison of two treatment algorithms using insulin glargine', *Diabetes Care*, vol. 28, no. 6, pp. 1282–1288, Jun. 2005, doi: 10.2337/diacare.28.6.1282.

[99]

S. W. Park, W. M. W. Bebakar, P. G. Hernandez, S. Macura, M. L. Hersløv, and R. de la Rosa, 'Insulin degludec/insulin aspart once daily in Type 2 diabetes: a comparison of simple or stepwise titration algorithms (BOOST : SIMPLE USE)', *Diabetic Medicine*, vol. 34, no. 2, pp. 174–179, Feb. 2017, doi: 10.1111/dme.13069.

[100]

Matthew C. Riddle, Julio Rosenstock, John Gerich, 'The treat-to-target trial: randomized addition of glargine or human NPH insulin to oral therapy of type 2 diabetic patients', *Diabetes Care* [Online]. Available: [http://go.galegroup.com.ezproxy4.lib.le.ac.uk/ps/retrieve.do?tabID=T002&resultListType=RESULT\\_LIST&searchResultsType=SingleTab&searchType=AdvancedSearchForm&currentPosition=9&docId=GALE%7CA110470954&docType=Article&sort=Relevance&contentSegment=&prodId=EAIM&contentSet=GALE%7CA110470954&searchId=R3&userGroupName=leicester&inPS=true](http://go.galegroup.com.ezproxy4.lib.le.ac.uk/ps/retrieve.do?tabID=T002&resultListType=RESULT_LIST&searchResultsType=SingleTab&searchType=AdvancedSearchForm&currentPosition=9&docId=GALE%7CA110470954&docType=Article&sort=Relevance&contentSegment=&prodId=EAIM&contentSet=GALE%7CA110470954&searchId=R3&userGroupName=leicester&inPS=true)

[101]

M. S. Fineman, B. B. Cirincione, D. Maggs, and M. Diamant, 'GLP-1 based therapies: differential effects on fasting and postprandial glucose', *Diabetes, Obesity and Metabolism*, vol. 14, no. 8, pp. 675–688, Aug. 2012, doi: 10.1111/j.1463-1326.2012.01560.x.

[102]

C. S. S. Frandsen and S. Madsbad, '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*, vol. 31, no. 11, pp. 1293–1300, Nov. 2014, doi: 10.1111/dme.12561.

[103]

R. R. Holman et al., 'Three-Year Efficacy of Complex Insulin Regimens in Type 2 Diabetes', *New England Journal of Medicine*, vol. 361, no. 18, pp. 1736–1747, Oct. 2009, doi: 10.1056/NEJMoa0905479.

[104]

J. Rosenstock et al., '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*, vol. 37, no. 7, pp. 1815–1823, Jul. 2014, doi: 10.2337/dc13-3055.

[105]

R. M. Bergenstal et al., 'Adjust to Target in Type 2 Diabetes: Comparison of a simple algorithm with carbohydrate counting for adjustment of mealtime insulin glulisine', *Diabetes Care*, vol. 31, no. 7, pp. 1305–1310, Jul. 2008, doi: 10.2337/dc07-2137.

[106]

D. R. Owens, S. D. Luzio, C. Sert-Langeron, and M. C. Riddle, 'Effects of initiation and titration of a single pre-prandial dose of insulin glulisine while continuing titrated insulin glargine in type 2 diabetes: a 6-month 'proof-of-concept' study', *Diabetes, Obesity and Metabolism*, vol. 13, no. 11, pp. 1020–1027, Nov. 2011, doi: 10.1111/j.1463-1326.2011.01459.x.

[107]

Hannele Yki-Järvinen, 'Is There Evidence to Support Use of Premixed or Prandial Insulin Regimens in Insulin-Naive or Previously Insulin-Treated Type 2 Diabetic Patients?', *Diabetes Care*, vol. 36, no. Suppl 2, 2013, doi: doi: 10.2337/dcS13-2026. [Online]. Available: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3920773/>

[108]

M. R. Lankisch, K. C. Ferlinz, J. L. Leahy, and W. A. Scherbaum, 'Introducing a simplified approach to insulin therapy in type 2 diabetes: a comparison of two single-dose regimens of insulin glulisine plus insulin glargine and oral antidiabetic drugs', *Diabetes, Obesity and Metabolism*, Sep. 2008, doi: 10.1111/j.1463-1326.2008.00967.x.

[109]

D. S. Lasserson, P. Glasziou, R. Perera, R. R. Holman, and A. J. Farmer, 'Optimal insulin regimens in type 2 diabetes mellitus: systematic review and meta-analyses', *Diabetologia*, vol. 52, no. 10, pp. 1990-2000, Oct. 2009, doi: 10.1007/s00125-009-1468-7.

[110]

D. Giugliano, M. I. Maiorino, G. Bellastella, P. Chiodini, A. Ceriello, and K. Esposito, 'Efficacy of Insulin Analogs in Achieving the Hemoglobin A1c Target of <7% in Type 2 Diabetes: Meta-analysis of randomized controlled trials', *Diabetes Care*, vol. 34, no. 2, pp. 510-517, Feb. 2011, doi: 10.2337/dc10-1710.

[111]

D. Raccach et al., 'Review of basal-plus insulin regimen options for simpler insulin intensification in people with Type 2 diabetes mellitus', *Diabetic Medicine*, Jun. 2017, doi: 10.1111/dme.13390.

[112]

D. Raccach et al., 'Review of basal-plus insulin regimen options for simpler insulin intensification in people with Type 2 diabetes mellitus', *Diabetic Medicine*, vol. 34, no. 9, pp. 1193-1204, Sep. 2017, doi: 10.1111/dme.13390.

[113]

Martha M. Funnell, 'Overcoming barriers to the initiation of insulin therapy', *Clinical Diabetes* [Online]. Available: [http://go.galegroup.com.ezproxy3.lib.le.ac.uk/ps/retrieve.do?sort=DA-SORT&docType=Article&tabID=T002&prodId=EAIM&searchId=R1&resultListType=RESULT\\_LIST&searchType=AdvancedSearchForm&contentSegment=&currentPosition=8&searchResultsType=SingleTab&inPS=true&userGroupName=leicester&docId=GALE%7CA159389875&contentSet=GALE%7CA159389875](http://go.galegroup.com.ezproxy3.lib.le.ac.uk/ps/retrieve.do?sort=DA-SORT&docType=Article&tabID=T002&prodId=EAIM&searchId=R1&resultListType=RESULT_LIST&searchType=AdvancedSearchForm&contentSegment=&currentPosition=8&searchResultsType=SingleTab&inPS=true&userGroupName=leicester&docId=GALE%7CA159389875&contentSet=GALE%7CA159389875)

[114]

H. McBain, S. Begum, S. Rahman, and K. Mulligan, 'Barriers to and enablers of insulin self-titration in adults with Type 2 diabetes: a qualitative study', *Diabetic Medicine*, vol. 34, no. 2, pp. 253–261, Feb. 2017, doi: 10.1111/dme.13196.

[115]

Manju Chandran, Steven V. Edelman, 'Have insulin, will fly: diabetes management during air travel and time zone adjustment strategies. (Practical Pointers)', *Clinical Diabetes* [Online]. Available: [http://go.galegroup.com.ezproxy3.lib.le.ac.uk/ps/retrieve.do?tabID=T002&resultListType=RESULT\\_LIST&searchResultsType=SingleTab&searchType=AdvancedSearchForm&currentPosition=3&docId=GALE%7CA100730300&docType=Article&sort=Relevance&contentSegment=&prodId=EAIM&contentSet=GALE%7CA100730300&searchId=R2&userGroupName=leicester&inPS=true](http://go.galegroup.com.ezproxy3.lib.le.ac.uk/ps/retrieve.do?tabID=T002&resultListType=RESULT_LIST&searchResultsType=SingleTab&searchType=AdvancedSearchForm&currentPosition=3&docId=GALE%7CA100730300&docType=Article&sort=Relevance&contentSegment=&prodId=EAIM&contentSet=GALE%7CA100730300&searchId=R2&userGroupName=leicester&inPS=true)

[116]

J. C. D. Burnett, 'Long- and Short-Haul Travel by Air: Issues for People With Diabetes on Insulin', *Journal of Travel Medicine*, vol. 13, no. 5, pp. 255–260, Sep. 2006, doi: 10.1111/j.1708-8305.2006.00057.x.

[117]

'Suggested insulin regimens for patients with type 1 diabetes mellitus who wish to fast during the month of Ramadan - ClinicalKey'. [Online]. Available: <https://www-clinicalkey-com.ezproxy3.lib.le.ac.uk/#!/content/journal/1-s2.0-S0149291808002737>

[118]

E. Hui, V. Bravis, S. Salih, M. Hassanein, and D. Devendra, 'Comparison of Humalog Mix 50 with human insulin Mix 30 in type 2 diabetes patients during Ramadan', *International Journal of Clinical Practice*, vol. 64, no. 8, pp. 1095–1099, Mar. 2010, doi: 10.1111/j.1742-1241.2010.02347.x.

[119]

S. Ali et al., 'Guidelines for managing diabetes in Ramadan', *Diabetic Medicine*, vol. 33, no.

10, pp. 1315–1329, Oct. 2016, doi: 10.1111/dme.13080.

[120]

O. Bakiner, M. E. Ertorer, E. Bozkirli, N. B. Tutuncu, and N. G. Demirag, 'Repaglinide plus single-dose insulin glargine: a safe regimen for low-risk type 2 diabetic patients who insist on fasting in Ramadan', *Acta Diabetologica*, vol. 46, no. 1, pp. 63–65, Mar. 2009, doi: 10.1007/s00592-008-0062-7.

[121]

Gregory T. Mucha, Stacia Merkel, William Thomas, John P. Bantle, 'Fasting and insulin glargine in individuals with type 1 diabetes', *Diabetes Care* [Online]. Available: [http://go.galegroup.com.ezproxy4.lib.le.ac.uk/ps/retrieve.do?tabID=T002&resultListType=RESULT\\_LIST&searchResultsType=SingleTab&searchType=AdvancedSearchForm&currentPosition=17&docId=GALE%7CA116666633&docType=Article&sort=Relevance&contentSegment=&prodId=EAIM&contentSet=GALE%7CA116666633&searchId=R8&userGroupName=leicester&inPS=true](http://go.galegroup.com.ezproxy4.lib.le.ac.uk/ps/retrieve.do?tabID=T002&resultListType=RESULT_LIST&searchResultsType=SingleTab&searchType=AdvancedSearchForm&currentPosition=17&docId=GALE%7CA116666633&docType=Article&sort=Relevance&contentSegment=&prodId=EAIM&contentSet=GALE%7CA116666633&searchId=R8&userGroupName=leicester&inPS=true)

[122]

'Diabetes & Metabolism - Présentation - EM consulte'. [Online]. Available: <http://www.em-consulte.com/article/80031/alertePM#N1010C>

[123]

E. D. Mollema, F. J. Snoek, R. J. Heine, and H. M. Van Der Ploeg, 'Phobia of self-injecting and self-testing in insulin-treated diabetes patients: opportunities for screening', *Diabetic Medicine*, vol. 18, no. 8, pp. 671–674, Dec. 2001, doi: 10.1046/j.1464-5491.2001.00547.x.

[124]

K. Jenkins, 'II. Needle phobia: a psychological perspective', *British Journal of Anaesthesia*, vol. 113, no. 1, pp. 4–6, Jul. 2014, doi: 10.1093/bja/aeu013.

[125]

A. Zambanini, R. B. Newson, M. Maisey, and M. D. Feher, 'Injection related anxiety in

insulin-treated diabetes', *Diabetes Research and Clinical Practice*, vol. 46, no. 3, pp. 239–246, Dec. 1999, doi: 10.1016/S0168-8227(99)00099-6.

[126]

V. Mattoo et al., 'A comparison of insulin lispro Mix25™ and human insulin 30/70 in the treatment of type 2 diabetes during Ramadan', *Diabetes Research and Clinical Practice*, vol. 59, no. 2, pp. 137–143, Feb. 2003, doi: 10.1016/S0168-8227(02)00202-4.

[127]

J. Akram, V. De Verga, and the R. S. Group, 'Insulin lispro (Lys(B28), Pro(B29)) in the treatment of diabetes during the fasting month of Ramadan', *Diabetic Medicine*, vol. 16, no. 10, pp. 867–874, Oct. 1999, doi: 10.1046/j.1464-5491.1999.00164.x.

[128]

E. Hui, V. Bravis, S. Salih, M. Hassanein, and D. Devendra, 'Comparison of Humalog Mix 50 with human insulin Mix 30 in type 2 diabetes patients during Ramadan', *International Journal of Clinical Practice*, vol. 64, no. 8, pp. 1095–1099, Mar. 2010, doi: 10.1111/j.1742-1241.2010.02347.x.

[129]

J. H. Simmons et al., 'Reliability of the Diabetes Fear of Injecting and Self-Testing Questionnaire in Pediatric Patients With Type 1 Diabetes', *Diabetes Care*, vol. 30, no. 4, pp. 987–988, Apr. 2007, doi: 10.2337/dc06-1553.

[130]

Crasto, W., *Handbook of Insulin Therapies*. Adis; 1st ed. 2016 edition, 2016 [Online]. Available: <https://ebookcentral.proquest.com/lib/leicester/detail.action?docID=4676975>

[131]

K. Lambert and R. I. G. Holt, 'The use of insulin analogues in pregnancy', *Diabetes, Obesity and Metabolism*, vol. 15, no. 10, pp. 888–900, Oct. 2013, doi: 10.1111/dom.12098.

[132]

'Hyperglycemia and Adverse Pregnancy Outcomes', *New England Journal of Medicine*, vol. 358, no. 19, pp. 1991–2002, May 2008, doi: 10.1056/NEJMoa0707943.

[133]

J. H. Gurwitz, 'Glucocorticoids and the Risk for Initiation of Hypoglycemic Therapy', *Archives of Internal Medicine*, vol. 154, no. 1, Jan. 1994, doi: 10.1001/archinte.1994.00420010131015.

[134]

'Randomized controlled trial of insulin detemir versus NPH for the treatment of pregnant women with diabetes - ClinicalKey'. [Online]. Available: <https://www-clinicalkey-com.ezproxy3.lib.le.ac.uk/#!/content/journal/1-s2.0-S0002937815005931>

[135]

L. R. Simmons, L. Molyneaux, D. K. Yue, and E. L. Chua, 'Steroid-Induced Diabetes: Is It Just Unmasking of Type 2 Diabetes?', *ISRN Endocrinology*, vol. 2012, pp. 1–5, 2012, doi: 10.5402/2012/910905.

[136]

M. C. Riddle, J. Rosenstock, A. Vlajnic, and L. Gao, 'Randomized, 1-year comparison of three ways to initiate and advance insulin for type 2 diabetes: twice-daily premixed insulin versus basal insulin with either basal-plus one prandial insulin or basal-bolus up to three prandial injections', *Diabetes, Obesity and Metabolism*, vol. 16, no. 5, pp. 396–402, May 2014, doi: 10.1111/dom.12225.

[137]

June James, 'End-of-life care: Anything but a pathway' [Online]. Available: [http://www.diabetesandprimarycare.co.uk/media/content/\\_master/3572/files/pdf/dpc15-6-292-7.pdf](http://www.diabetesandprimarycare.co.uk/media/content/_master/3572/files/pdf/dpc15-6-292-7.pdf)

[138]

A. Frisch et al., 'Prevalence and Clinical Outcome of Hyperglycemia in the Perioperative Period in Noncardiac Surgery', *Diabetes Care*, vol. 33, no. 8, pp. 1783–1788, Aug. 2010, doi: 10.2337/dc10-0304.

[139]

P. Home et al., 'Insulin Therapy in People With Type 2 Diabetes: Opportunities and Challenges?', *Diabetes Care*, vol. 37, no. 6, pp. 1499–1508, Jun. 2014, doi: 10.2337/dc13-2743.

[140]

M. J. Jackson et al., 'Perioperative management of diabetes in elective patients: a region-wide audit', *British Journal of Anaesthesia*, vol. 116, no. 4, pp. 501–506, Apr. 2016, doi: 10.1093/bja/aev554.

[141]

S. Rowles, A. Kilvert, and A. Sinclair, 'ABCD position statement on diabetes and end of life care', *Practical Diabetes International*, vol. 28, no. 1, pp. 26–27, Jan. 2011, doi: 10.1002/pdi.1547.

[142]

P. Schneiter, 'Kinetics of dexamethasone-induced alterations of glucose metabolism in healthy humans', *American Journal of Physiology - Endocrinology and Metabolism*, vol. 275, no. 5, pp. E806–E813, Nov. 1998 [Online]. Available: <http://ajpendo.physiology.org/content/275/5/E806>

[143]

D. Liu et al., 'A practical guide to the monitoring and management of the complications of systemic corticosteroid therapy', *Allergy, Asthma & Clinical Immunology*, vol. 9, no. 1, 2013, doi: 10.1186/1710-1492-9-30.

[144]

R. R. Holman et al., 'Addition of Biphasic, Prandial, or Basal Insulin to Oral Therapy in Type 2 Diabetes', *New England Journal of Medicine*, vol. 357, no. 17, pp. 1716–1730, Oct. 2007, doi: 10.1056/NEJMoa075392.



[145]

A. Kutz et al., 'The association of admission hyperglycaemia and adverse clinical outcome in medical emergencies: the multinational, prospective, observational TRIAGE study', *Diabetic Medicine*, Feb. 2017, doi: 10.1111/dme.13325.

[146]

S. Rowles, A. Kilvert, and A. Sinclair, 'ABCD position statement on diabetes and end of life care', *Practical Diabetes International*, vol. 28, no. 1, pp. 26–27, Jan. 2011, doi: 10.1002/pdi.1547.

[147]

M. Tapley and E. Needham, 'Improving end of life care for people with diabetes', *Practical Diabetes*, vol. 29, no. 8, pp. 306–307a, Oct. 2012, doi: 10.1002/pdi.1711.

[148]

'Intensity of peri-operative glycemic control and postoperative outcomes in patients with diabetes: a meta-analysis - ClinicalKey'. [Online]. Available: <https://www-clinicalkey-com.ezproxy3.lib.le.ac.uk/#!/content/journal/1-s2.0-S0168822713001873>

[149]

F Game, 'Annals of The Royal College of Surgeons of England', vol. 94, no. 5, 2012, doi: doi: 10.1308/003588412X13171221591655. [Online]. Available: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3954366/?report=classic>

[150]

I. Hommel et al., 'Perioperative diabetes care: room for improving the person centredness', *Diabetic Medicine*, vol. 32, no. 4, pp. 561–568, Apr. 2015, doi: 10.1111/dme.12600.

[151]

P. Aldam, N. Levy, and G. M. Hall, 'Perioperative management of diabetic patients: new

controversies', *British Journal of Anaesthesia*, vol. 113, no. 6, pp. 906–909, Dec. 2014, doi: 10.1093/bja/aeu259.

[152]

P. Barker et al., 'Peri-operative management of the surgical patient with diabetes 2015', *Anaesthesia*, vol. 70, no. 12, pp. 1427–1440, Dec. 2015, doi: 10.1111/anae.13233.

[153]

N. Levy, N. Penfold, and M. Mythen, 'Perioperative management of diabetes and the emerging role of anaesthetists as perioperative physicians', *British Journal of Anaesthesia*, vol. 116, no. 4, pp. 443–447, Apr. 2016, doi: 10.1093/bja/aew049.

[154]

S. Bajwa, M. Baruah, S. Kalra, and M. Kapoor, 'Interdisciplinary position statement on management of hyperglycemia in peri-operative and intensive care', *Journal of Anaesthesiology Clinical Pharmacology*, vol. 31, no. 2, 2015, doi: 10.4103/0970-9185.155141.

[155]

J. L. Hwang and R. E. Weiss, 'Steroid-induced diabetes: a clinical and molecular approach to understanding and treatment', *Diabetes/Metabolism Research and Reviews*, vol. 30, no. 2, pp. 96–102, Feb. 2014, doi: 10.1002/dmrr.2486.

[156]

S. Gururaj Setty, W. Crasto, J. Jarvis, K. Khunti, and M. J. Davies, 'New insulins and newer insulin regimens: a review of their role in improving glycaemic control in patients with diabetes', *Postgraduate Medical Journal*, vol. 92, no. 1085, pp. 152–164, Mar. 2016, doi: 10.1136/postgradmedj-2015-133716.

[157]

Crasto, W., *Handbook of Insulin Therapies*. Adis; 1st ed. 2016 edition, 2016 [Online]. Available: <https://ebookcentral.proquest.com/lib/leicester/detail.action?docID=4676975>

[158]

R. M. Bergenstal et al., 'A Randomized, Controlled Study of Once-Daily LY2605541, a Novel Long-Acting Basal Insulin, Versus Insulin Glargine in Basal Insulin-Treated Patients With Type 2 Diabetes', *Diabetes Care*, vol. 35, no. 11, pp. 2140–2147, Nov. 2012, doi: 10.2337/dc12-0060.

[159]

J. Rosenstock et al., 'Better Glycemic Control and Weight Loss With the Novel Long-Acting Basal Insulin LY2605541 Compared With Insulin Glargine in Type 1 Diabetes: A randomized, crossover study', *Diabetes Care*, vol. 36, no. 3, pp. 522–528, Mar. 2013, doi: 10.2337/dc12-0067.

[160]

M. C. Riddle, G. B. Bolli, M. Ziemien, I. Muehlen-Bartmer, F. Bizet, and P. D. Home, 'New Insulin Glargine 300 Units/mL Versus Glargine 100 Units/mL in People With Type 2 Diabetes Using Basal and Mealtime Insulin: Glucose Control and Hypoglycemia in a 6-Month Randomized Controlled Trial (EDITION 1)', *Diabetes Care*, vol. 37, no. 10, pp. 2755–2762, Oct. 2014, doi: 10.2337/dc14-0991.

[161]

P. D. Home et al., 'New Insulin Glargine 300 Units/mL Versus Glargine 100 Units/mL in People With Type 1 Diabetes: A Randomized, Phase 3a, Open-Label Clinical Trial (EDITION 4)', *Diabetes Care*, vol. 38, no. 12, pp. 2217–2225, Dec. 2015, doi: 10.2337/dc15-0249.

[162]

'New Insulin Glargine 300 U/mL: Glycemic Control and Hypoglycemia in a Meta-Analysis of Phase 3a EDITION Clinical Trials in People with T2DM - ClinicalKey'. [Online]. Available: <https://www-clinicalkey-com.ezproxy3.lib.le.ac.uk/#!/content/journal/1-s2.0-S1499267114003086>

[163]

'Efficacy and safety of a fixed-ratio combination of insulin degludec and liraglutide (IDegLira) compared with its components given alone: results of a phase 3, open-label,

randomised, 26-week, treat-to-target trial in insulin-naive patients with type 2 diabetes - ClinicalKey'. [Online]. Available: <https://www-clinicalkey-com.ezproxy4.lib.le.ac.uk/#!/content/journal/1-s2.0-S2213858714701743>

[164]

J. B. Buse et al., 'Contribution of Liraglutide in the Fixed-Ratio Combination of Insulin Degludec and Liraglutide (IDegLira)', *Diabetes Care*, vol. 37, no. 11, pp. 2926–2933, Nov. 2014, doi: 10.2337/dc14-0785.

[165]

'EASD Virtual Meeting'. [Online]. Available: <http://www.easdvirtualmeeting.org/resources/systematic-review-and-meta-analysis-of-the-efficacy-and-safety-of-sgl2-inhibitors-in-patients-with-type-2-diabetes-mellitus>

[166]

'Prandial inhaled insulin plus basal insulin glargine versus twice daily biphasic insulin for type 2 diabetes: a multicentre randomised trial - ClinicalKey'. [Online]. Available: <https://www-clinicalkey-com.ezproxy4.lib.le.ac.uk/#!/content/journal/1-s2.0-S0140673610606320>

[167]

Shosuke Satake, Mary Courtney Moore, Kayano Igawa, Margaret Converse, Benjamin Farmer, Doss W. Neal, 'Direct and indirect effects of insulin on glucose uptake and storage by the liver. (Original Articles)', *Diabetes* [Online]. Available: [http://go.galegroup.com.ezproxy4.lib.le.ac.uk/ps/retrieve.do?tabID=T002&resultListType=RESULT\\_LIST&searchResultsType=SingleTab&searchType=AdvancedSearchForm&currentPosition=2&docId=GALE%7CA87347789&docType=Article&sort=Relevance&contentSegment=&prodId=EAIM&contentSet=GALE%7CA87347789&searchId=R8&userGroupName=leicester&inPS=true](http://go.galegroup.com.ezproxy4.lib.le.ac.uk/ps/retrieve.do?tabID=T002&resultListType=RESULT_LIST&searchResultsType=SingleTab&searchType=AdvancedSearchForm&currentPosition=2&docId=GALE%7CA87347789&docType=Article&sort=Relevance&contentSegment=&prodId=EAIM&contentSet=GALE%7CA87347789&searchId=R8&userGroupName=leicester&inPS=true)

[168]

A. Khedkar et al., 'A dose range finding study of novel oral insulin (IN-105) under fed conditions in type 2 diabetes mellitus subjects', *Diabetes, Obesity and Metabolism*, vol. 12, no. 8, pp. 659–664, Feb. 2010, doi: 10.1111/j.1463-1326.2010.01213.x.

[169]

S. D. Luzio, G. Dunseath, A. Lockett, T. P. Broke-Smith, R. R. New, and D. R. Owens, 'The glucose lowering effect of an oral insulin (Capsulin) during an isoglycaemic clamp study in persons with type 2 diabetes', *Diabetes, Obesity and Metabolism*, vol. 12, no. 1, pp. 82–87, Jan. 2010, doi: 10.1111/j.1463-1326.2009.01146.x.

[170]

W. Blair Geho, 'A Single-blind, Placebo-controlled, Dose-ranging Trial of Oral Hepatic-directed Vesicle Insulin Add-on to Oral Antidiabetic Treatment in Patients With Type 2 Diabetes Mellitus', *Journal of Diabetes Science and Technology*, vol. 8, no. 3, 2014, doi: doi: 10.1177/1932296814524871. [Online]. Available: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4455427/>

[171]

T. Morçöl, P. Nagappan, L. Nerenbaum, A. Mitchell, and S. J. D. Bell, 'Calcium phosphate-PEG-insulin-casein (CAPIC) particles as oral delivery systems for insulin', *International Journal of Pharmaceutics*, vol. 277, no. 1–2, pp. 91–97, Jun. 2004, doi: 10.1016/j.ijpharm.2003.07.015.

[172]

P. Pozzilli et al., 'Biokinetics of buccal spray insulin in patients with type 1 diabetes', *Metabolism*, vol. 54, no. 7, pp. 930–934, Jul. 2005, doi: 10.1016/j.metabol.2005.02.008.

[173]

J. Guevara-Aguirre, M. Guevara, J. Saavedra, M. Mihic, and P. Modi, 'Beneficial Effects of Addition of Oral Spray Insulin (Oralin) on Insulin Secretion and Metabolic Control in Subjects with Type 2 Diabetes Mellitus Suboptimally Controlled on Oral Hypoglycemic Agents', *Diabetes Technology & Therapeutics*, vol. 6, no. 1, pp. 1–8, Feb. 2004, doi: 10.1089/152091504322783341.

[174]

M. Kuhlmann and M. Marre, 'Lessons learned from biosimilar epoetins and insulins', *The British Journal of Diabetes & Vascular Disease*, vol. 10, no. 2, pp. 90–97, Mar. 2010, doi: 10.1177/1474651409355454.

[175]

D. Raccach et al., 'Review of basal-plus insulin regimen options for simpler insulin intensification in people with Type 2 diabetes mellitus', *Diabetic Medicine*, vol. 34, no. 9, pp. 1193–1204, Sep. 2017, doi: 10.1111/dme.13390.

[176]

Lea, Mary R.     □Creme, PhyllisWriting At University, 3rd ed. McGraw-Hill Education, 2008 [Online]. Available: <http://ebookcentral.proquest.com.ezproxy3.lib.le.ac.uk/lib/leicester/detail.action?docID=345134>

[177]

S. Bailey, *Academic writing: a handbook for international students*, 3rd ed. London: Routledge, 2011 [Online]. Available: <http://ezproxy.lib.le.ac.uk/login?url=http://www.mylibrary.com?id=310467>