



Bibliography

Short & Frequent
Hemodialysis at home

 CLICK
& READ

 **Physidia**
REGENERATE YOUR LIFE

PERFORMANCES

Kt/V adequacy

    Fessi, H.; Szelag, J.-C.; Courivaud, C.; Nicoud, P.; Aguilera, D.; Gilbert, O.; Morena, M.; Thomas, M.; Canaud, B.; Cristol, J.-P. Safety and Efficacy of Short Daily Hemodialysis with Physidia S³ System: Clinical Performance Assessment during the Training Period. *J. Clin. Med.* 2022, 11, 2123.



S³

Cp

LW

Cherukuri, S., Bajo, M., Colussi, G. et al. Home hemodialysis treatment and outcomes: retrospective analysis of the Knowledge to Improve Home Dialysis Network in Europe (KIHDNEy) cohort. *BMC Nephrol* 19, 262 (2018). <https://doi.org/10.1186/s12882-018-1059-2>



Cp

    Fessi, H.; Nicoud, P.; Serrato, T.; Gilbert, O.; Courivaud, C.; Daoud, S.; Morena, M.; Thomas, M.; Canaud, B.; Cristol, J.-P. Two Years' Experience of Intensive Home Hemodialysis with the Physidia S³ System: Results from the RECAP Study. *J. Clin. Med.* 2023, 12, 1357.



S³

Low pre dialytic β2m value

    Fessi, H.; Nicoud, P.; Serrato, T.; Gilbert, O.; Courivaud, C.; Daoud, S.; Morena, M.; Thomas, M.; Canaud, B.; Cristol, J.-P. Two Years' Experience of Intensive Home Hemodialysis with the Physidia S³ System: Results from the RECAP Study. *J. Clin. Med.* 2023, 12, 1357.



S³

High β2m and middle molecules removal due to treatment frequency

    González Moya, M; Molina, P.; Molina, M.D.; García-Valdelvira, M.; Vizcaíno, B.; Montesa Marín, M.; Ventura, J.; Pérez-Zafra, E.; Calatayud, E.; Valero, A.; Beltrán, S.; Estañ, N.; Asuncion Sancho Calabuig, M.; MO661: Elimination of Middle and Large Uraemic Toxins in Short Daily Home Haemodialysis with Low Dialysate Volume: A Randomized Crossover Clinical Trial, *Nephrology Dialysis Transplantation*, Volume 37, Issue Supplement_3, May 2022, gfac077.021



LW

S³

S³

Cp

P1051A

Thomas, M.; Vincent, E.; Todorova, V.; P1051A
Single Session And Weekly Beta 2 Microglobulin Removal During Short Frequent Hemodialysis Using Physidia Technology, *Nephrology Dialysis Transplantation*, Volume 35, Issue Supplement_3, June 2020, gfaa142.P1051A



S³

Cp

LW

P1055

E;

Moncho, C.; Santaolaria, M.; Carbonell, A.; Sáez, G.; Estañ, N.; Pallardó, L.M.; P1055:

Remarkable Removals Of Beta-2-Microglobulin And Phosphate With Short-Daily Home Hemodialysis Using Low

Dialysate Flow Rate, *Nephrology Dialysis Transplantation*, Volume 35, Issue Supplement_3, June 2020, gfaa142.

P1055



Achievable performance with obese patients

Andrew Davenport, Differences in prescribed Kt/V and delivered haemodialysis dose—why obesity makes a difference to survival for haemodialysis patients when using a ‘one size fits all’ Kt/V target, *Nephrology Dialysis Transplantation*, Volume 28, Issue suppl_4, November 2013, Pages iv219–iv223



Read the article

Alalwan A A, Abou Trabeh A, Ahamed M, et al. (February 16, 2023) Low-Volume Home Haemodialysis and In-Centre Haemodialysis: Comparison of Dialysis Adequacy in Obese Individuals. *Cureus* 15(2): e35054

LW

CP



Read the article

QUALITY OF LIFE

Improvement quality of life

Miller BW, Himmelle R, Sawin DA, Kim J, Kossmann RJ. Choosing Home Hemodialysis: A Critical Review of Patient Outcomes. *Blood Purif.* 2018;45(1-3):224-229. doi: 10.1159/000485159. Epub 2018 Jan 26.



Read the abstract

Tennankore KK, Chan CT, Curran SP. Intensive home haemodialysis: benefits and barriers. *Nat Rev Nephrol.* 2012 Sep;8(9):515-22. doi: 10.1038/nrneph.2012.145. Epub 2012 Jul 24.



Read the abstract

Garg AX, Suri RS, Eggers P, Finkelstein FO, Greene T, Kimmel PL, Kliger AS, Larive B, Lindsay RM, Pierratos A, Unruh M, Chertow GM; Frequent Hemodialysis Network Trial Investigators. Patients receiving frequent hemodialysis have better health-related quality of life compared to patients receiving conventional hemodialysis. *Kidney Int.* 2017 Mar;91(3):746-754. doi: 10.1016/j.kint.2016.10.033. Epub 2017 Jan 13.



Read the article

Finkelstein FO, Schiller B, Daoui R, Gehr TW, Kraus MA, Lea J, Lee Y, Miller BW, Sinsakul M, Jaber BL. At-home short daily hemodialysis improves the long-term health-related quality of life. *Kidney Int.* 2012 Sep;82(5):561-9. doi: 10.1038/ki.2012.168. Epub 2012 May 23.

LW

CP



Read the article

Kraus MA, Fluck RJ, Weinhandl ED, Kansal S, Copland M, Komenda P, Finkelstein FO. Intensive Hemodialysis and Health-Related Quality of Life. *Am J Kidney Dis.* 2016 Nov;68(5S1):S33-S42. doi: 10.1053/j.ajkd.2016.05.023.



Read the abstract

J. Puñal Rioboó, E. Sánchez-Iriso, A. Ruano-Ravina, M.L. Varela Lema, D. Sánchez-Guisande, L. González-Rodríguez, J.A. Herrero, G. Barril, F. Maduell, J. Hernández, A. Otero, M.A. Bajo, R. Sánchez; Short Daily versus Conventional Hemodialysis Quality of Life: A Cross-Sectional Multicentric Study in Spain. *Blood Purif.* 1 October 2009; 28 (3): 159–164.



Read the article

Watanabe Y, Ohno Y, Inoue T, Takane H, Okada H, Suzuki H. Home hemodialysis and conventional in-center hemodialysis in Japan: a comparison of health-related quality of life. *Hemodial Int.* 2014 Oct;18 Suppl 1:S32-8. doi: 10.1111/hdi.12221

Quicker recovery time after treatment

Jaber BL, Lee Y, Collins AJ, Hull AR, Kraus MA, McCarthy J, Miller BW, Spry L, Finkelstein FO; FREEDOM

LW **Study Group.** Effect of daily hemodialysis on depressive symptoms and postdialysis recovery time: interim report from the FREEDOM (Following Rehabilitation, Economics and Everyday-Dialysis Outcome Measurements) Study. Am J Kidney Dis. 2010 Sep;56(3):531-9. doi: 10.1053/j.ajkd.2010.04.019.



Read the abstract

Garg AX, Suri RS, Eggers P, Finkelstein FO, Greene T, Kimmel PL, Klinger AS, Larive B, Lindsay RM, Pierratos A, Unruh M, Chertow GM; Frequent Hemodialysis Network Trial Investigators. Patients receiving frequent hemodialysis have better health-related quality of life compared to patients receiving conventional hemodialysis. Kidney Int. 2017 Mar;91(3):746-754. doi: 10.1016/j.kint.2016.10.033. Epub 2017 Jan 13.



Read the article

Patients can maintain activity (work)

Fessi, H.; Nicoud, P.; Serrato, T.; Gilbert, O.; Courivaud, C.; Daoud, S.; Morena, M.; Thomas, M.; Canaud, B.; Cristol, J.-P. Two Years' Experience of Intensive Home Hemodialysis with the Physidia S³ System: Results from the RECAP Study. J. Clin. Med. 2023, 12, 1357.



Read the article

Lower diet constraint

Watanabe Y, Ohno Y, Inoue T, Takane H, Okada H, Suzuki H. Home hemodialysis and conventional in-center hemodialysis in Japan: a comparison of health-related quality of life. Hemodial Int. 2014 Oct;18 Suppl 1:S32-8. doi: 10.1111/hdi.12221. PMID: 25330829.



Read the article

PATIENT PREFERENCE

Patients ask for flexibility, freedom, quality of life

Evangelidis N, Tong A, Manns B, Hemmelgarn B, Wheeler DC, Tugwell P, Crowe S, Harris T, Van Biesen W, Winkelmayr WC, Sautenet B, O'Donoghue D, Tam-Tham H, Youssouf S, Mandayam S, Ju A, Hawley C, Pollock C, Harris DC, Johnson DW, Rifkin DE, Tentori F, Agar J, Polkinghorne KR, Gallagher M, Kerr PG, McDonald SP, Howard K, Howell M, Craig JC; Standardized Outcomes in Nephrology–Hemodialysis (SONG-HD) Initiative. Developing a Set of Core Outcomes for Trials in Hemodialysis: An International Delphi Survey. Am J Kidney Dis. 2017 Oct;70(4):464-475. doi: 10.1053/j.ajkd.2016.11.029. Epub 2017 Feb 24.



Read the article

Heaf, J.; Heiro, M.; Petersons, A.; Vernere, B.; Povlsen, J.V.; Bagger Sørensen, A.; Clyne, N.; Bumblyte, I.; Zilinskiene, A.; Randers, E.; Løkkegaard, N.; Ots-Rosenberg, M.; Kjellevold, S.; Kampmann, J.D.; Rogland, B.; Lagreid, I.; Heimburger, O.; Lindholm, B.; Choice of dialysis modality among patients initiating dialysis: results of the Peridialysis study, Clinical Kidney Journal, Volume 14, Issue 9, September 2021, Pages 2064–2074



Read the article

Patients prefer treatment at home

Walker RC, Hanson CS, Palmer SC, Howard K, Morton RL, Marshall MR, Tong A. Patient and caregiver perspectives on home hemodialysis: a systematic review. *Am J Kidney Dis.* 2015 Mar;65(3):451-63. doi: 10.1053/j.ajkd.2014.10.020. Epub 2015 Jan 10.



Walker RC, Morton RL, Palmer SC, Marshall MR, Tong A, Howard K. A Discrete Choice Study of Patient Preferences for Dialysis Modalities. *Clin J Am Soc Nephrol.* 2018 Jan 6;13(1):100-108. doi: 10.2215/CJN.06830617. Epub 2017 Oct 19.



CLINICAL OUTCOMES

General Health

Garg AX, Suri RS, Eggers P, Finkelstein FO, Greene T, Kimmel PL, Kliger AS, Larive B, Lindsay RM, Pierratos A, Unruh M, Chertow GM; Frequent Hemodialysis Network Trial Investigators. Patients receiving frequent hemodialysis have better health-related quality of life compared to patients receiving conventional hemodialysis. *Kidney Int.* 2017 Mar;91(3):746-754. doi: 10.1016/j.kint.2016.10.033. Epub 2017 Jan 13.



Less Ventricular Hypertrophy

FHN Trial Group; Chertow GM, Levin NW, Beck GJ, Depner TA, Eggers PW, Gassman JJ, Gorodetskaya I, Greene T, James S, Larive B, Lindsay RM, Mehta RL, Miller B, Ornt DB, Rajagopalan S, Rastogi A, Rocco MV, Schiller B, Sergeyeva O, Schulman G, Ting GO, Unruh ML, Star RA, Kliger AS. In-center hemodialysis six times per week versus three times per week. *N Engl J Med.* 2010 Dec 9;363(24):2287-300. doi: 10.1056/NEJMoa1001593. Epub 2010 Nov 20. Erratum in: *N Engl J Med.* 2011 Jan 6;364(1):93.



Fessi, H.; Nicoud, P.; Serrato, T.; Gilbert, O.; Courivaud, C.; Daoud, S.; Morena, M.; Thomas, M.; Canaud, B.; Cristol, J.-P. Two Years' Experience of Intensive Home Hemodialysis with the Physidia S³ System: Results from the RECAP Study. *J. Clin. Med.* 2023, 12, 1357.



McCullough PA, Chan CT, Weinhandl ED, Burkart JM, Bakris GL. Intensive Hemodialysis, Left Ventricular Hypertrophy, and Cardiovascular Disease. *Am J Kidney Dis.* 2016 Nov;68(5S1):S5-S14. doi: 10.1053/j.ajkd.2016.05.025.



Chan CT, Greene T, Chertow GM, Kliger AS, Stokes JB, Beck GJ, Daugirdas JT, Kotanko P, Larive B, Levin NW, Mehta RL, Rocco M, Sanz J, Schiller BM, Yang PC, Rajagopalan S; Frequent Hemodialysis Network (FHN) Trial Group. Determinants of left ventricular mass in patients on hemodialysis: Frequent Hemodialysis Network (FHN) Trials. *Circ Cardiovasc Imaging.* 2012 Mar;5(2):251-61. doi: 10.1161/CIRCIMAGING.111.969923. Epub 2012 Feb 23.



Better hemodynamic (blood pressure decrease)

Nesrallah G, Suri R, Moist L, Kortas C, Lindsay RM. Volume control and blood pressure management in patients undergoing quotidian hemodialysis. Am J Kidney Dis. 2003 Jul;42(1 Suppl):13-7. doi: 10.1016/s0272-6386(03)00532-8



Read the abstract

Fessi, H.; Nicoud, P.; Serrato, T.; Gilbert, O.; Courivaud, C.; Daoud, S.; Morena, M.; Thomas, M.; Canaud, B.; Cristol, J.-P. Two Years' Experience of Intensive Home Hemodialysis with the Physidia S³ System: Results from the RECAP Study. J. Clin. Med. 2023, 12, 1357.



Read the article

FHN Trial Group; Chertow GM, Levin NW, Beck GJ, Depner TA, Eggers PW, Gassman JJ, Gorodetskaya I, Greene T, James S, Larive B, Lindsay RM, Mehta RL, Miller B, Ornt DB, Rajagopalan S, Rastogi A, Rocco MV, Schiller B, Sergeyeva O, Schulman G, Ting GO, Unruh ML, Star RA, Kliger AS. In-center hemodialysis six times per week versus three times per week. N Engl J Med. 2010 Dec 9;363(24):2287-300. doi: 10.1056/NEJMoa1001593. Epub 2010 Nov 20. Erratum in: N Engl J Med. 2011 Jan 6;364(1):93.



Read the article

Kotanko P, Garg AX, Depner T, Pierratos A, Chan CT, Levin NW, Greene T, Larive B, Beck GJ, Gassman J, Kliger AS, Stokes JB; FHN Trial Group. Effects of frequent hemodialysis on blood pressure: Results from the randomized frequent hemodialysis network trials. Hemodial Int. 2015 Jul;19(3):386-401. doi: 10.1111/hdi.12255. Epub 2015 Jan 5.



Read the article

Better hemodynamic (blood pressure decrease and/or lower hypertensive medication)

Fessi, H.; Nicoud, P.; Serrato, T.; Gilbert, O.; Courivaud, C.; Daoud, S.; Morena, M.; Thomas, M.; Canaud, B.; Cristol, J.-P. Two Years' Experience of Intensive Home Hemodialysis with the Physidia S³ System: Results from the RECAP Study. J. Clin. Med. 2023, 12, 1357.



Read the article

Cherukuri S, Bajo M, Colussi G, Corciulo R, Fessi H, Ficheux M, Slon M, Weinhandl E, Borman N. Home hemodialysis treatment and outcomes: retrospective analysis of the Knowledge to Improve Home Dialysis Network in Europe (KIHDNEY) cohort. BMC Nephrol. 2018 Oct 11;19(1):262. doi: 10.1186/s12882-018-1059-2.



Read the article

Kotanko P, Garg AX, Depner T, Pierratos A, Chan CT, Levin NW, Greene T, Larive B, Beck GJ, Gassman J, Kliger AS, Stokes JB; FHN Trial Group. Effects of frequent hemodialysis on blood pressure: Results from the randomized frequent hemodialysis network trials. Hemodial Int. 2015 Jul;19(3):386-401. doi: 10.1111/hdi.12255. Epub 2015 Jan 5.



Read the article

Better hemodynamic (lower intradialytic hypotension incidence)

Kotanko P, Garg AX, Depner T, Pierratos A, Chan CT, Levin NW, Greene T, Larive B, Beck GJ, Gassman J, Kliger AS, Stokes JB; FHN Trial Group. Effects of frequent hemodialysis on blood pressure: Results from the randomized frequent hemodialysis network trials. *Hemodial Int.* 2015 Jul;19(3):386-401. doi: 10.1111/hdi.12255. Epub 2015 Jan 5.



Fessi, H.; Nicoud, P.; Serrato, T.; Gilbert, O.; Courivaud, C.; Daoud, S.; Morena, M.; Thomas, M.; Canaud, B.; Cristol, J.-P. Two Years' Experience of Intensive Home Hemodialysis with the Physidia S³ System: Results from the RECAP Study. *J. Clin. Med.* 2023, 12, 1357.



Low ultrafiltration rate

Fessi, H.; Nicoud, P.; Serrato, T.; Gilbert, O.; Courivaud, C.; Daoud, S.; Morena, M.; Thomas, M.; Canaud, B.; Cristol, J.-P. Two Years' Experience of Intensive Home Hemodialysis with the Physidia S³ System: Results from the RECAP Study. *J. Clin. Med.* 2023, 12, 1357.



Cherukuri S, Bajo M, Colussi G, Corciulo R, Fessi H, Ficheux M, Slon M, Weinhandl E, Borman N. Home hemodialysis treatment and outcomes: retrospective analysis of the Knowledge to Improve Home Dialysis Network in Europe (KIHDNEy) cohort. *BMC Nephrol.* 2018 Oct 11;19(1):262. doi: 10.1186/s12882-018-1059-2.



Adequate phosphate level control

Fessi, H.; Nicoud, P.; Serrato, T.; Gilbert, O.; Courivaud, C.; Daoud, S.; Morena, M.; Thomas, M.; Canaud, B.; Cristol, J.-P. Two Years' Experience of Intensive Home Hemodialysis with the Physidia S³ System: Results from the RECAP Study. *J. Clin. Med.* 2023, 12, 1357.



Achinger SG, Ayus JC. The role of daily dialysis in the control of hyperphosphatemia. *Kidney Int Suppl.* 2005 Jun;(95):S28-32. doi: 10.1111/j.1523-1755.2005.09504.x.



Phosphate binders dose & PTH

Achinger SG, Ayus JC. The role of daily dialysis in the control of hyperphosphatemia. *Kidney Int Suppl.* 2005 Jun;(95):S28-32. doi: 10.1111/j.1523-1755.2005.09504.x.



Improvement nutritional status

Galland R, Traeger J. Short daily hemodialysis and nutritional status in patients with chronic renal failure. *Semin Dial.* 2004 Mar-Apr;17(2):104-8. doi: 10.1111/j.0894-0959.2004.17205.x



Read the article

Galland R, Traeger J, Arkouche W, Cleaud C, Delawari E, Fouque D. Short daily hemodialysis rapidly improves nutritional status in hemodialysis patients. *Kidney Int.* 2001 Oct;60(4):1555-60. doi: 10.1046/j.1523-1755.2001.00959.x.



Read the article

Woods JD, Port FK, Orzol S, Buoncristiani U, Young E, Wolfe RA, Held PJ. Clinical and biochemical correlates of starting «daily» hemodialysis. *Kidney Int.* 1999 Jun;55(6):2467-76. doi: 10.1046/j.1523-1755.1999.00493.x.



Read the article

 **Fessi, H.; Nicoud, P.; Serrato, T.; Gilbert, O.; Courivaud, C.; Daoud, S.; Morena, M.; Thomas, M.; Canaud, B.; Cristol, J.-P.** Two Years' Experience of Intensive Home Hemodialysis with the Physidia S³ System: Results from the RECAP Study. *J. Clin. Med.* 2023, 12, 1357.



Read the article

SURVIVAL

Longer life expectancy

Weinhandl ED, Liu J, Gilbertson DT, Arneson TJ, Collins AJ. Survival in daily home hemodialysis and matched thrice-weekly in-center hemodialysis patients. *J Am Soc Nephrol.* 2012 May;23(5):895-904. doi: 10.1681/ASN.2011080761. Epub 2012 Feb 23.



Read the abstract

Kansal SK, Morfin JA, Weinhandl ED. Survival and Kidney Transplant Incidence on Home versus In-Center Hemodialysis, Following Peritoneal Dialysis Technique Failure. *Perit Dial Int.* 2019 Jan-Feb;39(1):25-34. doi: 10.3747/pdi.2017.00207. Epub 2018 Jul 31.



Read the abstract

McCullough PA, Chan CT, Weinhandl ED, Burkart JM, Bakris GL. Intensive Hemodialysis, Left Ventricular Hypertrophy, and Cardiovascular Disease. *Am J Kidney Dis.* 2016 Nov;68(5S1):S5-S14. doi: 10.1053/j.ajkd.2016.05.025



Read the article

Rydell H, Ivarsson K, Almquist M, Segelmark M, Clyne N. Improved long-term survival with home hemodialysis compared with institutional hemodialysis and peritoneal dialysis: a matched cohort study. *BMC Nephrol.* 2019 Feb 13;20(1):52. doi: 10.1186/s12882-019-1245-x.



Read the article

Tomori K, Inoue T, Sugiyama M, Ohashi N, Murasugi H, Ohama K, Amano H, Watanabe Y, Okada H. Long-term survival of patients receiving home hemodialysis with self-punctured arteriovenous access. *PLoS One.* 2024 May 31;19(5):e0303055. doi: 10.1371/journal.pone.0303055.



Read the abstract

Lower hospitalization

McCullough PA, Chan CT, Weinhandl ED, Burkart JM, Bakris GL. Intensive Hemodialysis, Left Ventricular Hypertrophy, and Cardiovascular Disease. *Am J Kidney Dis.* 2016 Nov;68(5S1):S5-S14. doi: 10.1053/j.ajkd.2016.05.025



Read the article

Tennankore KK, Nadeau-Fredette AC, Matheson K, Chan CT, Trinh E, Perl J. Home versus In-Center Dialysis and Day of the Week Hospitalization: A Cohort Study. *Kidney360.* 2021 Oct 22;3(1):103-112. doi: 10.34067/kid.0003552021.



Read the article

Kumar VA, Ledezma ML, Idroos ML, Burchette RJ, Rasgon SA. Hospitalization rates in daily home hemodialysis versus peritoneal dialysis patients in the United States. *Am J Kidney Dis.* 2008 Oct;52(4):737-44. doi: 10.1053/j.ajkd.2008.06.013. Epub 2008 Aug 26.



Read the article

Advantage in Health Economy

Walker RC, Howard K, Morton RL. Home hemodialysis: a comprehensive review of patient-centered and economic considerations. *Clinicoecon Outcomes Res.* 2017 Feb 16;9:149-161. doi: 10.2147/CEOR.S69340.



Read the article