

BIBLIOGRAPHY
Genium®, C-Leg® and C-Leg Compact®
Microprocessor Controlled Prosthetic Knees

1. Kaufman KR, Frittoli S, Frigo CA. Gait asymmetry of transfemoral amputees using mechanical and microprocessor-controlled prosthetic knees. *Clinical Biomechanics*, 2012 Jun; 27(5):460-465. [http://www.clinbiomech.com/article/S0268-0033\(11\)00299-3/abstract](http://www.clinbiomech.com/article/S0268-0033(11)00299-3/abstract)
2. Burnfield JM, Eberly VJ, Gronely JAK, Perry J, Yule WJ, Mulroy SJ – Impact of Stance Phase Microprocessor Controlled Knee Prosthesis on Ramp Negotiation and Community Walking Function in K2 Level Transfemoral Amputees. *Prosthetics and Orthotics International*, 2012 Mar;36(1):95-104. Epub 2012 Jan 5. <http://poi.sagepub.com/content/36/1/95.short>
3. Theeven P, Hemmen B, Geers R, Smeets R, Brink P, Seelen H – Influence of Advanced Prosthetic Knee Joints on Perceived Performance and Everyday Life Activity Level of Low-Functional Persons with a transfemoral Amputation or Knee Disarticulation. *Journal of Rehabilitation Medicine*, 2012; 44: 454-461. <http://www.ingentaconnect.com/content/mjl/sreh/2012/00000044/00000005/art00011>
4. Bellmann M, Blumentritt S – Immediate Effects of a New Microprocessor-controlled Prosthetic Knee Joint: A Comparative Biomechanical Evaluation. *Archives Physical Medicine and Rehabilitation* 2012; 93(3): 541-549. [http://www.archives-pmr.org/article/S0003-9993\(11\)00944-0/abstract](http://www.archives-pmr.org/article/S0003-9993(11)00944-0/abstract)
5. Theeven P, Hemmen B, Seelen H – Functional Added Value of Microprocessor-Controlled Prosthetic Knee Joints in Daily Life Performance of Medicare Functional Classification Level-2 Amputees. *Journal of Rehabilitation Medicine*, 2011; 43:906-915. <http://www.rehab.research.va.gov/jour/09/46/3/pdf/Hafner.pdf>
6. Mâaref K, Martinet N, Grumillier C, Ghannouchi S, André JM, Paysant J. Kinematics in the Terminal Swing Phase of Unilateral Transfemoral Amputees: Microprocessor-Controlled Versus Swing-Phase Control Prosthetic Knees. *Archives Physical Medicine and Rehabilitation*, 2010; 91(6): 919-925. [http://www.archives-pmr.org/article/S0003-9993\(10\)00127-9/abstract](http://www.archives-pmr.org/article/S0003-9993(10)00127-9/abstract)
7. Theeven P, Hemmen B, Stevens C, Ilmer E, Brink P, Seelen H. Feasibility of a New Concept for Measuring ACTUAL Functional Performance in Daily Life of Transfemoral Amputees. *Journal of Rehabilitation Medicine*, 2010; 42: 744–751. <http://www.ingentaconnect.com/content/mjl/sreh/2010/00000042/00000008/art00007>
8. Highsmith MJ, Kahle JT: Safety, Energy Efficiency, and Cost Efficacy of the C-Leg for Transfemoral Amputees: A Review of the Literature. *Prosthetics and Orthotics International*, 2010; e-pub, 1–16. <http://informahealthcare.com/doi/abs/10.3109/03093646.2010.520054>
9. Bellmann M, Schmalz T, Blumentritt S: Comparative Biomechanical Analysis of Current Microprocessor-Controlled Prosthetic Knee Joints. *Archives of Physical Medicine and Rehabilitation*, 2010; 91(4): 644-52. [http://www.archives-pmr.org/article/S0003-9993\(10\)00008-0/abstract](http://www.archives-pmr.org/article/S0003-9993(10)00008-0/abstract)
10. Hafner BJ, Smith DG: Differences in Function and Safety between Medicare Functional Classification Level-2 and -3 Transfemoral Amputees and Influence of Prosthetic Knee Joint Control. *Journal of Rehabilitation Research and Development*, 2009; 46(3):417-434. <http://www.rehab.research.va.gov/jour/09/46/3/pdf/Hafner.pdf>

BIBLIOGRAPHY
Genium®, C-Leg® and C-Leg Compact®
Microprocessor Controlled Prosthetic Knees

11. Blumentritt S, Schmalz T, Jarasch R: Safety of C-Leg: Biomechanical Tests. *Journal of Prosthetics and Orthotics*, 2009; 21(1): 2-17.
http://journals.lww.com/jpojournal/Fulltext/2009/01000/The_Safety_of_C_Leg_Biomechanical_Tests.2.aspx?WT.mc_id=HPxADx20100319xMP
12. Berry D, Olson MD, Larntz K: Perceived Stability, Function and Satisfaction among Transfemoral Amputees using Microprocessor and Non-microprocessor Controlled Prosthetic Knees: A Multicenter Study. *Journal of Prosthetics and Orthotics*, 2009; 21(1):32-42.
http://journals.lww.com/jpojournal/Abstract/2009/01000/Perceived_Stability,_Function,_and_Satisfaction.5.aspx
13. Highsmith MJ, Kahle JT, Fox JL, Shaw KL: Decreased Heart Rate in a Geriatric Client after Physical Therapy Intervention and Accommodation with the C-Leg. *Journal of Prosthetics and Orthotics*, 2009; 21(1) 43-47.
http://journals.lww.com/jpojournal/Fulltext/2009/01000/Decreased_Heart_Rate_in_a_Geriatric_Client_After.6.aspx?WT.mc_id=HPxADx20100319xMP
14. Seelen HAM, Hemmen B, Schmeets AJ, Ament AJHA, Evers SMAA: Costs and Consequences of a Prosthesis with an Electronically Stance and Swing Phase Controlled Knee Joint. *Technology and Disability*, 2009; 21: 25–34.
<http://iospress.metapress.com/content/92862r25xm6817gx/>
15. Kahle JT, Highsmith MJ, Hubbard SL: Comparison of Non-microprocessor Knee Mechanism versus C-Leg on Prosthesis Evaluation Questionnaire, Stumbles, Falls, Walking Tests, Stair Descent, and Knee Preference. *Journal of Rehabilitation Research and Development*; 2008; 45 (1): 1-14. <http://www.rehab.research.va.gov/jour/08/45/1/pdf/ata glance.pdf>
16. Brodtkorb TH, Henniksson M, Johanneson-Munk K, Thidell F: Cost-effectiveness Of C-Leg Compared with Non-microprocessor Controlled Knees: A Modeling Approach. *Archives Physical Medicine and Rehabilitation*; 2008; 89(1): 24-30. [http://www.archives-pmr.org/article/S0003-9993\(07\)01596-1/abstract](http://www.archives-pmr.org/article/S0003-9993(07)01596-1/abstract)
17. Gerzeli S, Torbica A, Fattore G: Cost Utility Analysis of Knee Prosthesis with Complete Microprocessor Control (C-Leg) Compared with Mechanical Technology in Trans-Femoral Amputees. *European Journal of Health Economics*, 2009; 10: 47-59.
<http://www.springerlink.com/content/qqrr5v3814234637/>
18. Kaufman KR, Levine JA, Brey RH, McCrady SK, Padgett DJ, Joyner MJ: Energy Expenditure and Activity Level of Transfemoral Amputees using Passive Mechanical and Microprocessor-controlled Prosthetic Knees. *Archives of Physical Medicine and Rehabilitation*, 2008; 89(7):1380-1385. [http://www.archives-pmr.org/article/S0003-9993\(08\)00278-5/abstract](http://www.archives-pmr.org/article/S0003-9993(08)00278-5/abstract)
19. Hafner BJ, Willingham LL, Buell NC, Allyn KJ, Smith DG: Evaluation of Function, Performance, and Preference as Transfemoral Amputees Transition from Mechanical to Microprocessor Control of the Prosthetic Knee. *Archives Physical Medicine Rehabilitation*. 2007; 88(2): 207-17.
[http://www.archives-pmr.org/article/S0003-9993\(06\)01480-8/abstract](http://www.archives-pmr.org/article/S0003-9993(06)01480-8/abstract)
20. Kaufman KR, Levine JA, Brey RH, et al. Gait and Balance of Transfemoral Amputees using Passive Mechanical and Microprocessor-Controlled Prosthetic Knees. *Gait and Posture*. 2007; 26: 489-493. [http://www.gaitposture.com/article/S0966-6362\(07\)00185-3/abstract](http://www.gaitposture.com/article/S0966-6362(07)00185-3/abstract)

BIBLIOGRAPHY
Genium®, C-Leg® and C-Leg Compact®
Microprocessor Controlled Prosthetic Knees

21. Schmalz T, Blumentritt S, Marx B: Biomechanical Analysis of Stair Ambulation in Lower Limb Amputees. *Gait and Posture*. 2007; 25: 267-278. [http://www.gaitposture.com/article/S0966-6362\(06\)00053-1/abstract](http://www.gaitposture.com/article/S0966-6362(06)00053-1/abstract)
22. Seymour R, Engbretson B, Kott K, Ordway N, Brooks G, Crannell J, Hickernell E, Wheller K: Comparison between the C-Leg Microprocessor-Controlled Prosthetic Knee and Non-Microprocessor Control Prosthetic Knees: A Preliminary Study of Energy Expenditure, Obstacle Course Performance, and Quality Of Life Survey. *Prosthetics and Orthotics International* 2007; 31(1): 51 – 61. <http://poi.sagepub.com/content/31/1/51.short>
23. Bunce DJ, Breakey JW: The Impact of C-Leg on the Physical and Psychological Adjustment to Transfemoral Amputation. *Journal of Prosthetics & Orthotics*. 2007; 19(1): 7-14. http://journals.lww.com/jpojournal/Abstract/2007/01000/The_Impact_of_C_Leg_R_on_the_Physical_and.5.aspx
24. Chin T, et al: Comparison of Different Microprocessor Controlled Knee Joints on the Energy Consumption during Walking in Transfemoral Amputees: Intelligent Knee Prosthesis (IP) versus C-Leg. *Prosthetics and Orthotics International*. 2006 30(1): 73-80. <http://poi.sagepub.com/content/30/1/73.short>
25. Segal AD, Orendurff MS, Klute GK, McDowell ML, Pecoraro JA, Shofer J, Czerniecki JM: Kinematic and Kinetic Comparisons of Transfemoral Amputee Gait using C-Leg and Mauch SNS Prosthetic Knees. *Journal of Rehabilitation Research & Development*. 2006; 43(7): 857-870. <http://www.rehab.research.va.gov/jour/06/43/7/pdf/Segal.pdf>
26. Klute GK, et al: Prosthetic Intervention Effects on Activity of Lower Extremity Amputees. *Archives of Physical Medicine and Rehabilitation*. 2006; 87: 717-722. [http://www.archives-pmr.org/article/S0003-9993\(06\)00154-7/abstract](http://www.archives-pmr.org/article/S0003-9993(06)00154-7/abstract)
27. Williams RM et al: Does Having a Computerized Prosthetic Knee Influence Cognitive Performance during Amputee Walking? *Archives of Physical Medicine and Rehabilitation*. 2006; 87: 989-994. [http://www.archives-pmr.org/article/S0003-9993\(06\)00284-X/abstract](http://www.archives-pmr.org/article/S0003-9993(06)00284-X/abstract)
28. Orendurff MS et al: Gait Efficiency Using the C-Leg. *Journal of Rehabilitation Research and Development*. 2006; 43(2):239-246. <http://www.rehab.research.va.gov/jour/06/43/2/pdf/orendurff.pdf>
29. Johansson JL et al: A Clinical Comparison of Variable Damping and Mechanical Passive Prosthetic Knee Devices. *American Journal of Phys Medicine and Rehabilitation*. 2005; 84:563-575. http://journals.lww.com/ajpmr/Abstract/2005/08000/A_Clinical_Comparison_of_Variable_Dampin_g_and.1.aspx
30. Perry J, et al: Energy Expenditure and Gait Characteristics of a Bilateral Amputee Walking with C-Leg Prostheses Compared with Stubby and Conventional Articulating Prostheses. *Archives of Physical Medicine and Rehabilitation*. 2004; 85: 1711-1717. [http://www.archives-pmr.org/article/S0003-9993\(04\)00398-3/abstract](http://www.archives-pmr.org/article/S0003-9993(04)00398-3/abstract)

BIBLIOGRAPHY
Genium®, C-Leg® and C-Leg Compact®
Microprocessor Controlled Prosthetic Knees

31. Schmalz T, et al: Energy Expenditure and Biomechanical Characteristics of Lower Limb Amputee Gait: Influence of Prosthetic Alignment and Different Prosthetic Components. *Gait and Posture*. 2002; 16: 255-263. [http://www.gaitposture.com/article/S0966-6362\(02\)00008-5/abstract](http://www.gaitposture.com/article/S0966-6362(02)00008-5/abstract)
32. Stinus H: Biomechanics and Evaluation of the Microprocessor-Controlled C-Leg Exoprosthesis Knee Joint. *Z Orthop Ihre Grenzgeb*, 2000; 138(2): 278-282. <http://www.ncbi.nlm.nih.gov/pubmed/10929622>