Title:	Assessment of prostheses for transtibial amputees – Phase 2: quantification of relations amongst socket type, tissue sensation, socket pressure, function, comfort and quality of life
Issue/Rationale:	The quality of fit and comfort of the socket for a transtibial amputee prosthesis plays a critical role in the quality of work life and daily activities for the amputee.
Objectives:	• To compare the quality of life and quality of fit obtained with computer-aided design and manufacture (CAD/CAM) versus traditional transtibial sockets. • To develop a means of transferring that knowledge to prosthetists. • To optimize transtibial socket design. • To develop cost effective solutions for socket fabrication.
Anticipated Results/Impact:	The study will identify effective and efficient rehabilitation strategies and treatments for clients, to enable a fast return to work with a high degree of function and quality of life.
Keywords:	Computer aided design and manufacture (CAD/CAM) Prosthesis, Transtibial amputee
Investigators:	Janet L. Ronsky, University of Calgary Ron Zernicke, University of Calgary James Harder, Alberta Children's Hospital Calgary Vicki Brilz, Dynastream
From-To Dates:	2002 – 2004
Budget:	$71,000
Funding Agency:	Workers' Compensation Board-Alberta