­­Breast Cancer-Related Lymphedema Prevention Fact Sheet

# Breast Cancer-Related Lymphedema­­­

* Lymphedema is a devastating side effect of breast cancer treatment
* Surgical, radiation, or taxane-based chemotherapy treatments can damage the lymphatic drainage system in one or more arms
* Lymphedema is characterized by the buildup of lymphatic fluid that causes painful and sometimes debilitating tightness in the affected arm
	+ Lymphedema can also lead to infections requiring hospitalization
* Lymphedema develops in stages, once Stage 2 is reached, it is a chronic condition that the patient will manage for the rest of their lives
	+ Stage 0 – Lymphatic drainage is impaired setting the stage for overload
	+ Stage 1 – Accumulation of lymphatic fluid causes swelling
	+ Stage 2 – Increased swelling and fibrotic tissue begins to develop
	+ Stage 3 – Arm becomes large and misshapen
* Chronic lymphedema is debilitating, and treatments are expensive and time-consuming:
	+ Complex decongestive physiotherapy
	+ Pneumatic pumps
	+ Hospitalization and antibiotics for infections
	+ Surgical lymph node transfer or lymphovenous anastomosis (LVA)

# Statistical Figures

* Breast Cancer-Related Lymphedema
	+ There are over 290 thousand newly diagnosed breast cancer patients every year in the U.S.1
	+ 80% of breast cancer patients are at risk of developing arm lymphedema2
	+ 1 in 5 breast cancer survivors will be impacted by arm lymphedema3
	+ Lymphedema has significant economic implications for patients: annual health-related out-of- pocket costs for patients diagnosed with breast cancer related lymphedema are estimated at

$2,306, or $3,325 including productivity losses4

# Breast Cancer-Related Lymphedema Prevention

* Lymphedema is reversible if it is caught in Stage 0 or Stage 1 and treated with simple at-home care
* If patients wait for symptoms to seek lymphedema treatment, its often too late to reverse it5:
	+ Most patients don’t experience symptoms until swelling has developed in Stage 1
	+ Owing to the time to see the doctor and therapists for treatment, most patients do not receive treatment until Stage 2, when it is too late to prevent lymphedema
* In order to catch lymphedema at Stage 0 or Stage 1, at-risk patients must be routinely monitored using clinical assessments with their L-Dex® score
* When Stage 0 or Stage 1 lymphedema is detected, patients are treated with 4 weeks of at-home care including a standard compression sleeve, which has been shown to stop and reverse lymphedema progression6

# L-Dex® Score

* L-Dex® score measures the ratio of fluid accumulation in an arm that is at risk for lymphedema and compares it to a healthy arm
* A change in L-Dex® score of +6.5 from a baseline value is an indicator of the development of lymphedema and, combined with clinical assessment, triggers the need for at-home intervention
* The L-Dex® score is determined using a sophisticated technology called bioimpedance spectroscopy (BIS), which is capable of detecting fluid changes as small as 2.4 tablespoons in the arms
* A BIS scan takes less than 30 seconds to complete and is completely non-invasive
* Patients can get BIS scans for their L-Dex® score at their treating cancer center
* L-Dex® is measured on a system called SOZO®, from ImpediMed; L-Dex® was developed by and is proprietary to ImpediMed and not available from any other sources

# Clinical Evidence

* L-Dex® has over twenty years of research with over 17,500 patients studied
* The PREVENT trial demonstrated that routine monitoring with L-Dex® combined with at-home intervention resulted in a 92% reduction in lymphedema progression at 3 years6
* PREVENT is the largest randomized controlled trial focused on lymphedema prevention
	+ 1,200 patients
	+ 10 centers across US and Australia

# References

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