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Oncoplastic breast surgery for the management of duct carcinoma in situ

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Dedication

I dedicate this work to ...

My beloved Mother and father, to whom I owe everything I ever did in my life,

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List of Abbreviations

ADH	Atypical Ductal Hyperplasia
AFIP	The Armed Forces Institute of Pathology
BCS	Breast Conserving Surgery
BRCA1	Breast Cancer–Associated genes
DCIS	Duct carcinoma in Situ
DCISM	Duct Carcinoma In Situ with Microinvasion
DIN	Ductal Intraepithelial Neoplasia
FSH	Follicle Stimulating Hormone
GA	General Anesthesia
HRT	Hormone Replacement Therapy
IDH	Intraductal Hyperplasia
LCIS	Lobular carcinoma In Situ
LD	Latissimus Dorsi Myocutaneous Flap
LH	Luteinizing Hormone
MRI	Magnetic resonance imaging
NAC	Nipple -Areola Complex
NC	Neoadjuvant Chemotherapy
NCCN	National Comprehensive Cancer Network

NAF	Nipple Aspirate Fluid
OPS	Oncoplastic Surgery
SCNB	Stereotactic Core Needle Biopsy
SEER	Surveillance Epidemiology and End Results program
SGAP	Superior Gluteal Artery Perforator
TMG	The Inner Thigh - Transverse Myocutaneous Gracilis flap
TRAM	Transverse Rectus Abdominus Myocutaneous flap
VAB	Vacuum-Assisted Biopsy

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Introduction

Ductal carcinoma in situ (DCIS) of the breast is a heterogeneous group of lesions in which malignant cells arise and proliferate within the breast ducts without invasion of the basement membrane (*Howlader et al.*, 2008).

According to the Surveillance Epidemiology and End Results program (SEER) from 1975–2008, in situ breast cancers represented approximately 15% of all new breast cancer diagnoses in the United States. DCIS consists of approximately 84% of all in situ disease and accounts for 27% of all newly diagnosed breast cancers (*Kettritz et al.*, 2004).

In the past, most DCIS had presented as a palpable mass. Now, most new cases (more than 90%) are non palpable and discovered mammographically and is found in approximately 20% of all screening mammograms (*Ernster et al., 2002*). DCIS may also present as pathologic nipple discharge with or without a mass or may be identified incidentally in a breast biopsy performed to treat or diagnose another abnormality. If left untreated, invasive breast cancer may develop in 30–50% of DCIS (*Kurniawan et al., 2010*).