**Table 2. Compilation of Clinical studies on intraductal delivery of Nanoformulations**

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| S.No. | Phase | Study Design | Condition | Intervention | Objectives | Outcome | Reference |
| 1 | phase I | 30 subjects | women awaiting mastectomy for treatment of invasive cancer | Three doses of both carboplatin and pegylated liposomal doxorubicin (PLD) was given in 5-8 ducts | To demonstrate the viability and safety of administering chemotherapeutic medicines intraductal into several ducts | Treatment is well tolerated. Breast redness or swelling was observed in subjects taking carboplatin at the lower dose. In subjects with the highest amount of carboplatin, mild erythema and swelling were present in 3 subjects (60%), while mild nausea and vomiting were found in four (80%) subjects. In contrast, for subjects taking PLD, mild erythema and swelling can be noticed in most subjects over 72 hours upon drug administration. | [81] |
| 2 | - | Retrospective searches of English breast screening databases were used to identify women with DCIS at the screening who had no evidence of invasive cancer and who had not undergone surgery within six months of diagnosis. | DCIS | - | To ascertain the results of women who did not undergo surgery for DCIS discovered on screening in the six months after diagnosis. | There were 311 eligible women's data, with a median age of 62. Invasive cancer struck 60 women, 56 on the ipsilateral side and 4 on the contralateral. For at least ten years, the chance of ipsilateral invasion grew about linearly.  For low, middle, and high grade DCIS, the 10-year cumulative risk of ipsilateral invasion was 9% (95% CI 4-21%), 39% (24-58%), and 36% (24-50%), respectively, and was higher in younger women, those with larger DCIS lesions, and those with microinvasion. The majority of newly acquired invasive tumours were grade 2 or 3. | [87] |
| 3 | Phase II | Single arm-multicenter cooperative | Estrogen Receptor-Positive Postmenopausal Ductal Carcinoma In Situ | Before having surgery, patients received letrozole 2.5 mg a day as treatment. Breast MRIs were acquired in the beginning, three months later, and six months later. | Primary endocrine therapy for ductal carcinoma in situ (DCIS).  The study investigated the potential for a brief course of letrozole and examined whether treatment alters the radiographic and biological characteristics of estrogen receptor (ER)-positive DCIS. | 70 out of the 79 individuals that were enrolled had taken letrozole for six months.  For each timepoint, MRI data were available for 67 of these individuals. 0.004 to 26.3 cm3 in size made up the baseline MRI volumes.  Progesterone receptor H-score, Ki67 score, and median baseline ER H-score all experienced consistent declines. | [88] |