

Breast Cancer Care: Supporting ADC Therapy Through Proactive Monitoring

Successful management of ADC therapy starts with:

Knowing the common and less common AEs

Evaluation of key risk factors that increase the likelihood of AEs

Assessing the patient at baseline

Monitoring and recognizing what to look for once treatment starts

Knowing when to act

Understanding treatment modification options



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CLICK TO SELECT ADC-RELATED TOXICITIES



Hematologic



Gastrointestinal



Dermatologic



Neuropathy



ILD/pneumonitis



Ocular



Cardiac



Key Takeaway



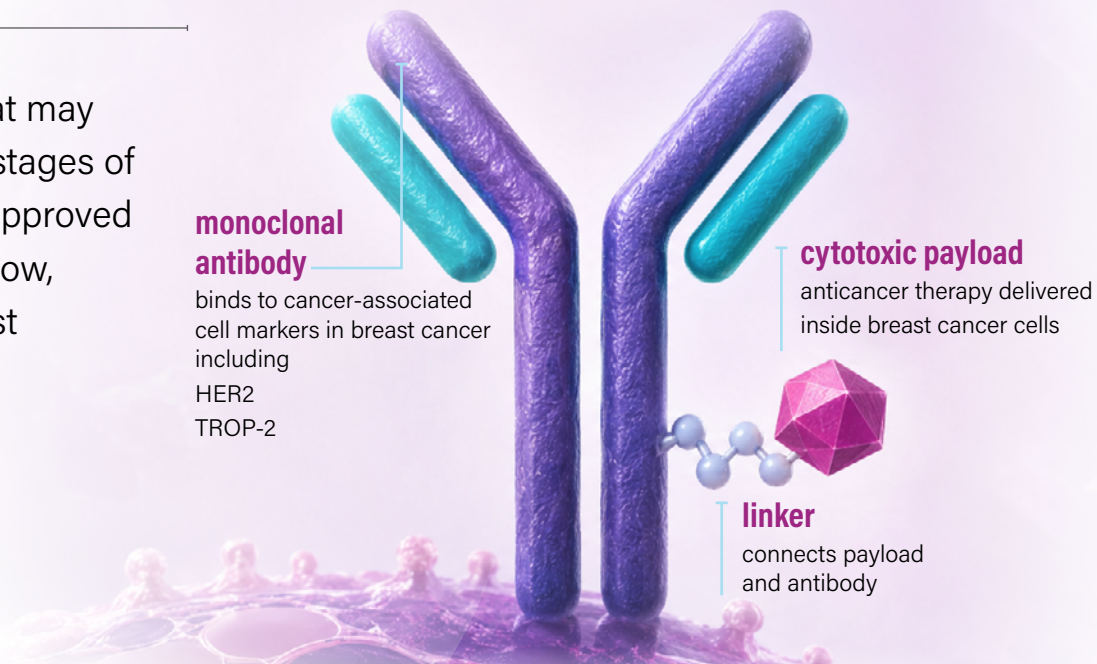
What Are ADCs?

ADCs are an important class of targeted therapies that may be used in the treatment of breast cancer at multiple stages of disease, across multiple subtypes according to their approved uses, including HER2-positive, HER2-low, HER2-ultralow, HR-positive/HER2-negative, and triple-negative breast cancers according to their approved uses.¹⁻³

Approved ADCs in breast cancer include⁴⁻⁷

- ▶ Trastuzumab deruxtecan⁴
- ▶ Sacituzumab govitecan⁶
- ▶ Trastuzumab emtansine⁵
- ▶ Datopotamab deruxtecan⁷

ADCs enable targeted delivery of cytotoxic therapy to tumor cells in breast cancer



Treatment delivery that targets breast cancer-specific antigens may reduce off-target toxicity vs non-targeted therapies²

However, treatment-related AEs are common

46-48% of patients on ADCs for breast cancer experience grade >3 AEs²

Successful management of ADC therapy starts with

- 1 KNOW**
the common and less common AEs
- 2 ASSESS**
risk factors
- 3 COMPLETE**
baseline assessments



Oncology nurses play a critical role in identifying AEs early, supporting patients, and facilitating timely intervention that can help patients remain on treatment and achieve optimal outcomes

ADC, antibody-drug conjugate; AE, adverse event; HER2, human epidermal growth factor receptor 2; HR, hormone receptor; TROP-2, trophoblast cell surface antigen 2.

1. Gogia A. *Front Oncol*. 2026;16:1755574. 2. Kang S, et al. *Ther Adv Med Oncol*. 2025;17:17588359251324889. 3. D'Arienzo A, et al. *eClinicalMedicine*. 2023;62. 4. Enhertu (fam-trastuzumab deruxtecan-nxki) [prescribing information]. Daiichi Sankyo, Inc; 2025. Accessed August 3, 2026. https://www.fda.gov/drugsatfda_docs/label/2026/761139s039lbl.pdf. 5. Kadcyla (ado-trastuzumab emtansine) [prescribing information]. Genentech, Inc; 2026. Accessed July 21, 2026. https://www.accessdata.fda.gov/drugsaccessdataatfda_docs/label/2026/125427s125lbl.pdf. 6. Trodelvy (sacituzumab govitecan-hziy) [prescribing information]. Gilead Sciences, Inc; 2024. Accessed August 3, 2026. https://www.accessdata.fda.gov/drugsatfda_docs/label/2026/761115s064lbl.pdf. 7. Datroway (datopotamab deruxtecan-dlnk) [prescribing information]. Daiichi Sankyo, Inc; 2025. Accessed July 21, 2026. https://www.accessdata.fda.gov/drugsatfda_docs/label/2025/761394s000lbl.pdf.



Common ADC Toxicities in Breast Cancer^{1-3*}

Most Common AEs



Hematologic

Neutropenia
Anemia
Thrombocytopenia



Gastrointestinal

Nausea
Vomiting
Diarrhea
Stomatitis



Hepatic

Elevated AST/ALT
Hyperbilirubinemia



Dermatologic

Alopecia
Rash/pruritus



Neuropathy

Numbness
Tingling
Pain and functional
impairment



ILD/pneumonitis

Cough
Dyspnea



Ocular

Dry eyes
Blurred vision
Conjunctivitis
Keratitis



Cardiac

Left ventricular dysfunction (decreased LVEF) Cardiac failure Arrhythmias

Less Common but Clinically Important AEs

*Toxicities reflect data from multiple clinical trials of approved ADCs across breast cancer subtypes and treatment settings.

ADC, antibody-drug conjugate; AE, adverse event; AST, aspartate aminotransferase; ALT, alanine aminotransferase; ILD, interstitial lung disease; LVEF, left ventricular ejection fraction.

1. D'Arienzo A, et al. *eClinicalMedicine*. 2023;62. 2. Enhertu (fam-trastuzumab deruxtecan-nxki) [prescribing information]. Daiichi Sankyo, Inc; 2025. Accessed July 21, 2026. https://www.accessdata.fda.gov/drugsatfda_docs/label/2025/761139s038s042lbl.pdf.

3. Datroway (datopotamab deruxtecan-dlnk) prescribing information. Daiichi Sankyo, Inc; 2025. Accessed July 21, 2026. https://www.accessdata.fda.gov/drugsatfda_docs/label/2025/761394s000lbl.pdf.



Preparing for ADC Therapy¹⁻³

Risk Factors?¹⁻³

Patients with these risk factors may be more vulnerable to ADC-related toxicities



Demographic Risk Factors

Older age
East Asian ancestry



Hematologic and GI Toxicities

Baseline cytopenias
UGT1A1 genetic variants



Peripheral Neuropathy

Preexisting neuropathy
Prior exposure to taxanes



ILD/Pneumonitis

Preexisting lung disease or pulmonary comorbidity
Low baseline oxygen saturation
Renal impairment

Baseline Assessments¹⁻³



Hematologic

CBC with differential



Dermatologic

Skin assessment and patient counseling



Pulmonary

HRCT: helps identify preexisting lung abnormalities and patients at increased risk for pulmonary toxicity
Pulse oximetry/oxygen saturation: helps establish baseline respiratory status and identify patients requiring closer monitoring
Renal function assessment (eg, serum creatinine, eGFR, or creatinine clearance): helps identify patients with moderate or severe renal impairment, which may be associated with an increased risk of ILD/pneumonitis



BASELINE ASSESSMENTS BEFORE ADC THERAPY

Help identify preexisting conditions and establish a reference point for monitoring during treatment



Cardiac

ECG: assess baseline cardiac rhythm and conduction abnormalities
TTE ($\pm$ GLS): assess baseline cardiac function and LVEF prior to HER2-directed ADC therapy



GI / Hepatic

LFTs (serum AST, ALT, and bilirubin levels)



Neurologic

Baseline neurologic assessment
Avoid neurotoxic drugs



Ocular

Ophthalmic evaluation: identify preexisting ocular abnormalities and establish a baseline for monitoring visual changes during treatment

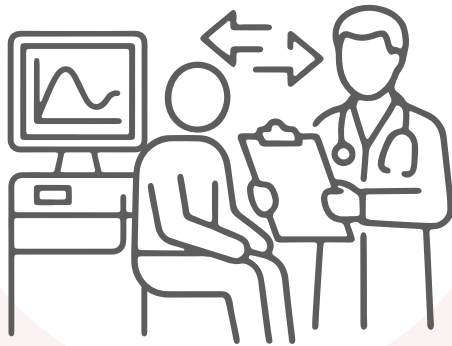
ADC, antibody-drug conjugate; AE, adverse event; ALT, alanine aminotransferase; AST, aspartate aminotransferase; CBC, complete blood count; ECG, electrocardiogram; eGFR, estimated glomerular filtration rate; GLS, global longitudinal strain; HRCT, high-resolution computed tomography; ILD, interstitial lung disease; LFTs, liver function tests; LVEF, left ventricular ejection fraction; UGT1A1, uridine diphosphate glucuronosyltransferase 1A1.

1. Gogia A. *Front Oncol.* 2026;16:1755574. 2. Kang S, et al. *Ther Adv Med Oncol.* 2025;17:17588359251324889. 3. D'Arienzo A, et al. *eClinicalMedicine*, 2023;62.

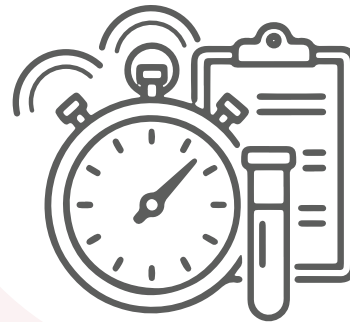


Practical Approach to ADC Toxicity Management

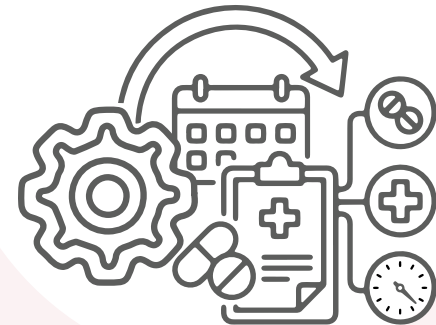
ADCs are used across multiple breast cancer subtypes and stages. Oncology nurses play a critical role in identifying AEs early, supporting patients, and facilitating timely intervention that can help patients remain on treatment and achieve optimal outcomes



Continuous monitoring



Know when to act



Understand treatment modification options



ADC, antibody-drug conjugate; AE, adverse event.



Hematologic Toxicities With ADCs in Breast Cancer¹⁻⁶



Knowing The AEs¹

Neutropenia

Low neutrophil count

Anemia

Low hemoglobin or red blood cell count

Thrombocytopenia

Low platelet count



Evaluation Of Key Risk Factors^{1,2}

Baseline cytopenias or prior neutropenia

UGT1A1 genetic variant



Baseline Assessments¹

CBC with differential

Review of prior neutropenia/cytopenias and relevant comorbidities



Monitoring And Recognizing What To Look For³⁻⁵

HCP monitoring

CBC at baseline and prior to each treatment cycle or periodically during treatment as clinically indicated

Patient Symptoms to Monitor and Report

Fever

Signs of infection

Unusual bruising or bleeding



Knowing When To Act (HCP)²

Fever

Neutropenia

Symptomatic anemia

Clinically significant bleeding



Understanding Treatment Modification Options^{1,4-6}

Follow agent-specific prescribing information for dose interruption, dose reduction, or treatment discontinuation in patients experiencing hematologic toxicities

G-CSF prophylaxis in patients with high risk of febrile neutropenia receiving sacituzumab govitecan

Dose reduction if symptoms are recurrent



KEY TAKEAWAY

Proactive assessment, vigilant monitoring, and timely intervention can help manage hematologic toxicities and support continuity of ADC therapy

ADC, antibody-drug conjugate; CBC, complete blood count; G-CSF, granulocyte colony-stimulating factor; HCP, healthcare provider; UGT1A1, uridine diphosphate glucuronosyltransferase 1A1.

1. Gogia A. *Front Oncol*. 2026;16:1755574. 2. Kang S, et al. *Ther Adv Med Oncol*. 2025;17:17588359251324889. 3. D'Arienzo A, et al. *eClinicalMedicine*. 2023;62. 4. Enhertu (fam-trastuzumab deruxtecan-nxki) [prescribing information]. Daiichi Sankyo, Inc; 2025. Accessed August 3, 2026. https://www.accessdata.fda.gov/drugsatfda_docs/label/2026/761139s039lbl.pdf. 5. Trodelvy (sacituzumab govitecan-hziy) [prescribing information]. Gilead Sciences, Inc; 2024. Accessed August 3, 2026. https://www.accessdata.fda.gov/drugsatfda_docs/label/2026/761115s064lbl.pdf. 6. Kadcyla (ado-trastuzumab emtansine) [prescribing information]. Genentech, Inc; 2026. Accessed August 3, 2026. https://www.accessdata.fda.gov/drugsatfda_docs/label/2026/125427s125lbl.pdf.



GI Toxicities With ADCs in Breast Cancer¹⁻⁴



Knowing The AEs¹

Nausea/Vomiting

Diarrhea

Increased frequency of loose or watery stools

Stomatitis/Oral Mucositis

Inflammation or ulceration of the oral mucosa



Evaluation Of Key Risk Factors²

UGT1A1 genetic variant

SN-38 metabolism



Baseline Assessments²

Nutritional and hydration status

Oral cavity assessment



Monitoring And Recognizing What To Look For^{3,4}

HCP monitoring

Nausea/vomiting severity

Stool frequency and consistency

Hydration status and oral intake

Patient Symptoms to Monitor and Report

Mouth pain

Oral ulcers

Dry mouth



Knowing When To Act (HCP)²

CTCAE grade ≥ 3 nausea

Vomiting not controlled with supportive medications

Diarrhea not controlled with supportive medications



Understanding Treatment Modification Options¹⁻³

Nausea or Vomiting Prophylactic antiemetics as appropriate

Diarrhea Loperamide, IV fluids for persistent or $\geq$ grade 3 diarrhea, Octreotide for severe or persistent diarrhea, Soft diet, adequate fluid intake, avoid lactose-containing foods, and alcohol

Stomatitis/Oral Mucositis (Cryotherapy chips), Steroid mouthwash, Soft diet, Adequate fluid intake



KEY TAKEAWAY

Proactive assessment, ongoing monitoring, early symptom recognition, and timely supportive care can help manage GI toxicities and support continuity of ADC therapy

ADC, antibody-drug conjugate; AE, adverse event; CTCAE, Common Terminology Criteria for Adverse Events; GI, gastrointestinal; HCP, healthcare provider; IV, intravenous.

1. Gogia A. *Front Oncol.* 2026;16:1755574. 2. D'Arienzo A, et al. *eClinicalMedicine.* 2023;62. 3. Kang S, et al. *Ther Adv Med Oncol.* 2025;17:17588359251324889. 4. Trodelvy (sacituzumab govitecan-hziy) [prescribing information]. Gilead Sciences, Inc; 2024. Accessed August 3, 2026. https://www.accessdata.fda.gov/drugsatfda_docs/label/2026/761115s064lbl.pdf.



Dermatologic Toxicities With ADCs in Breast Cancer¹⁻³



Knowing The AEs^{1,2}

Alopecia

Partial or complete hair loss

Rash / Urticaria

Cutaneous eruption characterized by a change in the appearance and/or texture of the skin

Pruritus

An unpleasant sensation that provokes the desire to scratch

Infusion-Related Cutaneous Reactions

Cutaneous reactions occurring during or shortly after infusion

Infusion-Related Cutaneous Reactions

Hypotension: decrease in blood pressure below normal levels
Anaphylaxis: severe, potentially life-threatening hypersensitivity reaction



Baseline Assessments³

Patient counseling regarding potential alopecia and skin-related AEs



Monitoring And Recognizing What To Look For²

HCP monitoring

Assessment of skin eruptions

Patient-reported symptoms

CTCAE grading of alopecia (grade ≥ 2 ; $\geq 50\%$ hair loss)



Knowing When To Act (HCP)²

Blistering

Significant QoL impact



Understanding Treatment Modification Options²

Rash / Urticaria Oral antihistamines, topical corticosteroids

Alopecia Counseling and supportive measures



KEY TAKEAWAY

Proactive assessment, ongoing monitoring, early symptom recognition, and timely intervention can help manage dermatologic toxicities and support continuity of ADC therapy

ADC, antibody-drug conjugate; AE, adverse event; CTCAE, Common Terminology Criteria for Adverse Events; HCP, healthcare provider; QoL, quality of life.

1. Gogia A. *Front Oncol.* 2026;16:1755574. 2. D'Arienzo A, et al. *eClinicalMedicine.* 2023;62. 3. Ciruelos E, et al. *Clin Transl Oncol.* 2024;26(7):1539-1548.



Neuropathy-Related Toxicities With ADCs in Breast Cancer¹⁻⁷



Knowing The AEs^{1,2}

Neuropathy

Damage or dysfunction of peripheral nerves



Evaluation Of Key Risk Factors³

Preexisting neuropathy

Prior exposure to neurotoxic therapies (eg taxane)



Baseline Assessments¹

Baseline neurologic assessment; avoid neurotoxic drugs



Monitoring And Recognizing What To Look For²

Patient Symptoms to Monitor

Tingling or numbness

Neuropathic pain

Functional impairment



Knowing When To Act (HCP)⁵⁻⁷

New or worsening neuropathy

NCI CTCAE grade ≥ 2 peripheral neuropathy



Understanding Treatment Modification Options^{1,5,7}

Hold/reduce dose for grade ≥ 3 neuropathy

Pharmacologic interventions (eg, duloxetine, gabapentin, pregabalin, topical anesthetics)



KEY TAKEAWAY

Proactive assessment, ongoing monitoring, early symptom recognition, and timely intervention can help manage neuropathy and support continuity of ADC therapy

ADC, antibody-drug conjugate; CTCAE, Common Terminology Criteria for Adverse Events; HCP, healthcare provider; NCI, National Cancer Institute; T-DM1, trastuzumab emtansine.

1. Gogia A. *Front Oncol.* 2026;16:1755574. 2. Brodsky M, et al. *Transl Breast Cancer Res.* 2026;7:18. 3. D'Arienzo A, et al. *eClinicalMedicine.* 2023;62. 4. Chen Y, et al. *Sci Rep.* 2024;14:21386. 5. Kang S, et al. *Ther Adv Med Oncol.*

2025;17:17588359251324889. 6. Trodelvy (sacituzumab govitecan-hziy) [prescribing information]. Gilead Sciences, Inc; 2024. Accessed August 3, 2026. https://www.accessdata.fda.gov/drugsatfda_docs/label/2026/761115s064lbl.pdf.

7. Kadcylla (ado-trastuzumab emtansine) [prescribing information]. Genentech, Inc; 2026. Accessed July 21, 2026. https://www.accessdata.fda.gov/drugsatfda_docs/label/2026/125427s125lbl.pdf.



ILD and Pneumonitis AEs With ADCs in Breast Cancer¹⁻⁴



Knowing The AEs¹

ILD/Pneumonitis
Inflammation of the lung tissue



Evaluation Of Key Risk Factors²

Preexisting lung conditions
Older age (>65 y)
Baseline oxygen saturation <95%
Moderate or severe renal impairment
East Asian ancestry Smoking



Baseline Assessments^{1,2}

High-resolution chest CT (HRCT)
Pulse oximetry
PE and vital signs
Patient counseling for early respiratory symptoms



Monitoring And Recognizing What To Look For¹⁻³

HCP monitoring

Assessment of hypoxemia and respiratory symptoms
Review of chest imaging for evidence of ILD/pneumonitis

Patient Symptoms to Monitor and Report

Cough
Dyspnea/shortness of breath
Fever
Respiratory symptoms



Knowing When To Act (HCP)²

Any new or worsening cough
Any new or worsening dyspnea/shortness of breath
Fever accompanied by respiratory symptoms
Any suspected ILD/pneumonitis requiring prompt evaluation and treatment interruption pending assessment



Understanding Treatment Modification Options^{1,4}

CTCAE grade 1: Monitor and closely follow up; interrupt treatment until ILD resolves
Consider corticosteroids

CTCAE grade 2: Permanently discontinue treatment and promptly initiate systemic corticosteroids or increasing dose of steroids if worsening of symptoms

CTCAE grade 3: Hospitalization, promptly initiate high-dose steroids Consider other immuno-suppressants for severe cases¹



KEY TAKEAWAY

Proactive assessment, ongoing monitoring, early symptom recognition, and timely intervention can help manage ILD/pneumonitis and support treatment continuity with ADC therapy

ADC, antibody-drug conjugate; CT, computed tomography; CTCAE, Common Terminology Criteria for Adverse Events; HCP, healthcare provider; HRCT, high-resolution computed tomography; ILD, interstitial lung disease; PE, physical examination; SpO₂, peripheral oxygen saturation; T-DXd, trastuzumab deruxtecan.

1. Gogia A. *Front Oncol.* 2026;16:1755574. 2. Ciruelos E, et al. *Clin Transl Oncol.* 2024;26(7):1539-1548. 3. D'Arienzo A, et al. *eClinicalMedicine.* 2023;62. 4. Kang S, et al. *Ther Adv Med Oncol.* 2025;17:17588359251324889.



Ocular Toxicity With ADCs in Breast Cancer¹⁻³



Knowing The AEs¹

Dry Eye

Inadequate lubrication of the ocular surface

Keratitis

Inflammation of the cornea



Evaluation Of Key Risk Factors²

Preexisting ocular disorders



Baseline Assessments²

Comprehensive ophthalmologic examination

Visual acuity assessment



Monitoring And Recognizing What To Look For^{1,2}

HCP monitoring

Periodic ophthalmologic examinations and symptom-triggered ophthalmologic monitoring

Visual acuity assessment

Evaluation for keratitis and other ocular AEs

Assessment of new or worsening ocular symptoms

Patient Symptoms to Monitor and Report

Dry eyes

Blurred vision or visual impairment

Excessive tearing

Eye discomfort or pain

Conjunctivitis symptoms



Knowing When To Act (HCP)¹

Any new or worsening visual symptoms

Eye pain or signs of keratitis



Understanding Treatment Modification Options^{1,2}

Artificial tears and avoiding contact lenses

Treatment modifications for CTCAE ≥ 2

Topical corticosteroid drops if needed

Discontinue treatment or reduce dose if patients do not respond to supportive care



KEY TAKEAWAY

Proactive assessment, ongoing monitoring, early symptom recognition, and timely intervention can help manage ocular toxicities and support continuity of ADC therapy

ADC, antibody-drug conjugate; CT, computed tomography; CTCAE, Common Terminology Criteria for Adverse Events; HCP, healthcare provider; HRCT, high-resolution computed tomography; ILD, interstitial lung disease; PE, physical examination; SpO₂, peripheral oxygen saturation; T-DXd, trastuzumab deruxtecan.

1. Gogia A. *Front Oncol.* 2026;16:1755574. 2. Ciruelos E, et al. *Clin Transl Oncol.* 2024;26(7):1539-1548. 3. D'Arienzo A, et al. *eClinicalMedicine.* 2023;62. 4. Kang S, et al. *Ther Adv Med Oncol.* 2025;17:17588359251324889.



Cardiac Toxicity With ADCs in Breast Cancer^{1,2}



Knowing The AEs¹

Cardiac toxicity may present as decreased LVEF, with heart failure occurring rarely



Evaluation Of Key Risk Factors¹

Prior cardiotoxic therapy
Preexisting cardiovascular disease
Lifestyle risk factors
Cardiovascular risk factors



Baseline Assessments¹

Baseline echocardiogram (TTE)
LVEF assessment
Consider GLS assessment, if available
Cardiovascular history and risk assessment



Monitoring And Recognizing What To Look For^{1,2}

HCP monitoring

QT prolongation
Left ventricular dysfunction
Heart failure symptoms
Serial LVEF assessment
GLS monitoring



Knowing When To Act (HCP)²

LVEF decreases to 40%-45% with an absolute decrease of 10%-20% from baseline at monitoring requires prompt evaluation

Symptomatic heart failure



Understanding Treatment Modification Options¹⁻³

Hold treatment for LVEF 40%-45% with significant decline from baseline

Permanently discontinue if LVEF <40%, persistent clinically significant decline >20% on repeat assessment, or symptomatic CHF

Resume treatment only if cardiac function recovers per prescribing guidance

In patients with asymptomatic mild-to-moderate CTRCD, treatment should be continued with the addition of cardioprotective therapy (ACE-I/ARB and beta-blocker)



KEY TAKEAWAY

Proactive assessment, ongoing monitoring, early symptom recognition, and timely intervention can help manage cardiac toxicity and support the safe continuation of ADC therapy while optimizing patient outcomes

ACE-I, angiotensin-converting enzyme inhibitor; ADC, antibody-drug conjugate; ARB, angiotensin receptor blocker; CHF, congestive heart failure; CTRCD, cancer therapy-related cardiac dysfunction; GLS, global longitudinal strain; HCP, healthcare provider; LVEF, left ventricular ejection fraction; QT, QT interval; TTE, transthoracic echocardiogram.

1. D'Arienzo A, et al. *eClinicalMedicine*. 2023;62. 2. Ciruelos E, et al. *Clin Transl Oncol*. 2024;26(7):1539-1548. 3. Enhertu (fam-trastuzumab deruxtecan-nxki) [prescribing information]. Daiichi Sankyo, Inc; 2025. Accessed August 3, 2026. https://www.accessdata.fda.gov/drugsatfda_docs/label/2026/761139s039lbl.pdf.



Practical Considerations for ADC Toxicity Management¹⁻³



Early Detection Preserves Optionality

Early detection and screening protocols focused on identifying AEs enables proactive management and helps prevent severe toxicity or treatment discontinuation¹



Dose Modification Is Planned Care

Dose reductions/ intermittent treatment interruptions built into ADC protocols to maintain efficacy²



Patient-Reported Symptoms Are Essential

Consistent patient engagement practices provides increased opportunity for symptom reporting, which is critical for detecting toxicities early²



Multidisciplinary Care Improves Outcomes

Collaboration across oncology, pulmonology (ILD), cardiology (LVEF), ophthalmology (ocular AEs), and supportive care teams ensures timely and coordinated management of complex toxicities¹⁻³

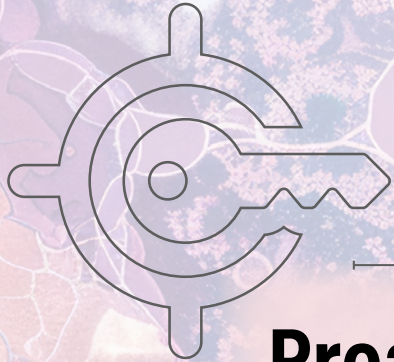


Importance Of Patient Education

Clear patient counseling on times to report symptoms, and when to seek care^{1,2}

ADC, antibody-drug conjugate; AE, adverse event; ILD, interstitial lung disease; LVEF, left ventricular ejection fraction.

1. Ciruelos E, et al. *Clin Transl Oncol*. 2024;26(7):1539-1548. 2. Kang S, et al. *Ther Adv Med Oncol*. 2025;17:17588359251324889. 3. D'Arienzo A, et al. *eClinicalMedicine*. 2023;62.



KEY MESSAGE

**Proactive monitoring, early recognition,
and timely intervention can help patients
with breast cancer remain on ADC therapy**