Marrea Peters, PharmD; Eric Betzold, MS; Alicia Zagel, PhD, MPH. Fairview Pharmacy Services, Minneapolis, MN.

BACKGROUND

• Site of care (SOC) optimization is appealing to third-party payers because it...
• Improves access to therapy
• Increases patient satisfaction
• Allows patients to transition from higher-cost to lower-cost settings without compromising quality of care.

• Administration of specialty drugs in physician offices or home settings can improve care and provide cost-savings of 33 - 52%.

• Oncology patients receiving home-based therapies have high satisfaction rates and report improved physical & mental well-being without an increased risk of adverse drug reactions.

PURPOSE

To compare safety outcomes in patients receiving oncology therapy through home infusion and outpatient hospital infusion centers, including:

- Rate of hospital admission/readmission
- Incidence of infusion-related reactions

REFERENCES


METHODS

Study Design: Single-center, retrospective cohort study; chart review and EMR data

• Adult patients (15 years or older)
• Received advanced oncology infusions
• Infusions occurred January 1, 2020 – December 31, 2022
• SOC included Fairview Home Infusion or an M Health Fairview hospital-based outpatient infusion center

ADVANCED ONCOLOGY INFUSIONS:

- Avastin (Bevacizumab)
- Bacencio (Bortezomib)
- Dacarbazine (DTIC)
- Darzalex (Daratumumab)
- Dacogen (Decitabine)
- Genzir (Gemcitabine)
- Imfinzi (Durvalumab)
- Vidaza (Azacytidine)
- Velcade

INCLUSION CRITERIA

• 29 patients; 555 infusions
• 1,412 patients; 26,733 infusions

PRELIMINARY RESULTS

ED or Hospital Admission within 48-hours Post-Infusion by SOC

HOME INFUSION

- 2 / 29 Patients
- 6.9%
- p-value = 0.85

HOSPITAL-BASED INFUSION CENTER

- 64 / 1412 Patients
- 6.0%

Inpatient-Related Infusion reactions by SOC

HOME INFUSION

- Infusion-related reaction definitions:
  - Mild: fever, sweats, chills, rigors, skin rash, or minor shortness of breath
  - Severe: hives, severe facial swelling, low blood pressure, and/or inability to breath

- 1 / 29 Patients
- 3.5%

HOSPITAL-BASED INFUSION CENTER

- 14 / 1412 Patients
- 0.93%

ED or Hospital Admissions within 48-hours Post-Infusion by SOC:

HOME INFUSION

- 2 / 29 Patients
- 6.9%

HOSPITAL-BASED INFUSION CENTER

- 64 / 1412 Patients
- 6.0%

Patients with COVID, RSV, or Influenza infections Occurring within 14-days of infusions by SOC:

HOME INFUSION

- 0 / 29 Patients
- 0.0%

HOSPITAL-BASED INFUSION CENTER

- 8 / 1412 Patients
- 0.53%

DISCUSSION

In adult patients receiving advanced oncology infusion, no statistically significant difference was found between home infusion and hospital-based outpatient infusion center regarding:

- Infusion-related reactions,
- ED or Hospital admissions within 48 hours post-infusion, or
- COVID, RSV, or Influenza infections following infusion.

This study indicates that home infusion may be a safe alternative to hospital-based infusion center care, especially for vulnerable patients such as those with cancer.

Study limitations include a small home infusion population size, differences in reporting between SOC, and the inability to determine results of at-home COVID tests.

CONCLUSION

- There is minimal research evaluating safety outcomes of oncology infusions within home infusion.
- This study found similar safety profiles between home infusion and hospital-based infusion centers, based on infusion-related reactions, ED or Hospital admissions within 48-hours post-infusion, and COVID, RSV, or Influenza infections following infusion.
- Larger, multicenter studies of safety outcomes, patient satisfaction, and total cost of care among patients receiving advanced oncology therapies by SOC are needed.
- The anticipated societal benefit of this study is to promote the utility of home infusion as a mechanism to lower Healthcare cost and improve access to therapy without compromising quality of care.

DISCLOSURES

The authors have no conflicts of interest to disclose.

CONTACT INFORMATION:

Marrea Peters, PharmD
PGY-1 Ambulatory Care Resident
marrea.peters@fairview.org