Dear Friends and Colleagues,

Exceptional care and focus on the needs of our patients and their families continue to be at the center of our care model at Goshen Center for Cancer Care. The perseverance and commitment to further advance cancer treatment expertise, holistic support strategies, and clinical research enable us to provide high quality care to our patients in ways that are unique in the region.

The cancer program works hard to connect with many talented specialists throughout the Midwest as we support our patients during their time in our care. Our team of six fellowship-trained surgical oncologists is the largest in the state and has capabilities that far exceed the routine community cancer center. Our medical and radiation oncologists are renowned in the region for their clinical expertise. Oncology-certified nurses advocate daily for our patients at the cancer center. Our counselors are involved in national research studies impacting patient care related to stress during treatment. These resources, partnered with our regional physicians and specialists, result in exceptional patient care and experiences.

Research is a specific focus in our battle to eliminate cancer and receives significant support from our team. Our research accrual and clinical trials volume continue to increase each year. Patients in our clinical trials increased significantly in 2013. We support more than 80 clinical trials and administer trials to patients across the Midwest. Supporting clinical trials is part of our effort to defeat cancer, not only patient by patient, but in ways that can impact cancer care nationwide.

Patient satisfaction with our cancer care program is like none other in our region. Patients deserve, require and expect excellence in the cancer care they receive from us. This includes quality in all aspects of cancer care – from integrative and support services to dedicated oncologists and inpatient nursing care.

Our program is committed to delivering advanced, multidisciplinary cancer care found nowhere else. Our integrated cancer care team – along with all of us at IU Health Goshen – strives to provide innovative, outstanding care and services through exceptional people doing exceptional work.

Sincerely,

Randy Christophel
President and Chief Executive Officer
IU Health Goshen
The Indiana University (IU) Health Goshen Hospital Cancer Program continues to diagnose and treat cancer with the most advanced techniques available with the goal of diagnosing cancers early, when they are the most treatable. We work every day to meet the needs of our patients, many of whom travel great distance to receive care, focusing on quality outcomes and experience.

IU Health Goshen Center for Cancer Care (IUHGCCC) is the only program with fully fellowship-trained surgical oncologists. Our surgeons all received additional training in treating cancer after their general surgery residency. Their expertise covers breast, lung, gastrointestinal, gynecological, head/neck, urological, skin/soft tissue and endocrine cancers. Their training was completed at renowned cancer centers and includes: Brigham and Women’s Hospital, Harvard Medical School, Boston, MA; Fox Chase Cancer Center, Philadelphia, PA; MD Anderson Cancer Center, Houston, TX; Memorial Sloan Kettering Cancer Center, New York, NY; Michigan State University, East Lansing, MI; Mount Sinai Hospital, New York, NY; National Cancer Institute, Bethesda, MD; and Pittsburgh Cancer Institute and Department of Pathology, University of Pittsburgh, Pittsburgh, PA. With over 73 combined years in treating cancer patients, they offer surgical treatments that are not readily available outside of major metropolitan cancer centers. These include daVinci robotic surgery; minimally invasive techniques; hyperthermic intraperitoneal chemotherapy (HIPEC); isolated limb infusion; staged liver resections, advanced hepatic, pancreatic and biliary surgery; extended pancreatic resection; endobronchial ultrasound and navigational bronchoscopy; minimally invasive parathyroid surgery; and iodine radioactive seed breast localization.

The Chairman’s Report
Roderich E. Schwarz, MD, PhD, FACS, who also serves as the medical director for IUHGCCC, contributes to this year’s report with a review of our experience with esophageal and gastric cancer. This study documents adherence of the highest quality to the standard of care in treating esophageal and gastric cancer.

We are all typically aware of screening guidelines for breast, colorectal, cervical and prostate cancer, but did you know that the American Cancer Society recommends screening for lung cancer for those individuals who are at high risk? Each year more people die of lung cancer than colon, breast and prostate cancers combined. If you are 55-74 year old, in fairly good health and have a history of smoking and are either still smoking or quit within the last 15 years, you may be a candidate for screening. The National Lung Screening Trial showed that using a low-dose CT scan to detect lung cancer early in a high-risk population leads to a lower chance of dying.

At IUHGCCC, in addition to early screening, we utilize the latest techniques, including PET/CT scans, lung biopsies, hybrid-type bronchoendoscopy and additional leading-edge, minimally invasive diagnostic tools to further aid in the early detection of lung cancer. These procedures include endobronchial ultrasound (EBUS), a relatively new procedure used in the diagnosis of lung cancer. EBUS uses sound waves to provide real-time imaging of the surface of the airways, blood vessels, lungs and lymph nodes. The improved images allow the physician to easily view difficult-to-reach areas and to access more and smaller lymph nodes for biopsy than conventional surgery. In addition, pathologists can process and examine biopsy samples as they are obtained and request additional samples immediately, if needed. Currently, IUHGCCC is one of the few facilities in the country to offer this minimally invasive diagnostic tool.
The Cancer Committee


Develop and evaluate the annual goals and objectives for the clinical, educational and programmatic activities related to cancer.

Promote a coordinated, multidisciplinary approach to patient management.

Ensure that educational and consultative cancer conferences cover all major sites and related issues.

Ensure that an active, supportive care system is in place for patients, families and staff.

Promote clinical research.
Monitor quality management and improvement through completion of quality management studies that focus on quality, access to care and outcomes.

Supervise the cancer registry and ensure accurate and timely abstracting, staging and follow-up reporting.

Perform quality control of registry data.

Encourage data usage and regular reporting.

Ensure content of the annual report meets requirements.

Publish the annual report.

Uphold medical ethical standards.
2013 Facts and Figures

Cancer Registry Report

Indiana University Health Goshen Center for Cancer Care Cancer Registry department is a hospital-based cancer information center. Certified tumor registrars collect, interpret and record a wide range of demographic, diagnostic and treatment information on all cancer patients who are diagnosed and/or treated at this facility. Since 2004, Goshen Center for Cancer Care has been designated as a Community Hospital Comprehensive Cancer Center through the American College of Surgeons/Commission on Cancer. In September of 2013, this program received a three-year Accreditation with Commendation at the Gold level. This indicates the program performs at the highest level possible and achieved all 8 out of 8 possible commendations for exceptional achievement.

IU Health Goshen Center for Cancer Care is mandated by Indiana Code 16-38-2 to provide Indiana State Department of Health a detailed abstract for each case of malignant disease that is diagnosed and/or treated at this facility, as well as benign brain and related CNS tumors. Cancer data is also submitted to the National Cancer Data Base (NCDB), and comparisons are frequently performed to analyze state and national trends and benchmarking statistics. Quality of registry data is paramount. For this reason, quality assurance procedures, periodic audits from the Indiana State Department of Health, and internal quality assurance practices are performed to ensure that Cancer Registry data are complete and correct.

In 2013, a total of 844 cases were accessioned by the Cancer Registry: 687 were analytic (new cancer cases) and 157 were non-analytic. During 2013, the Cancer Registry followed 2,722 patients and maintained a follow-up rate of 85.5% on patients diagnosed since the Registry reference year (80% required by the Commission on Cancer) and a follow-up rate of 90.2% for patients diagnosed within the last five years (90% required by the Commission on Cancer). IU Health Goshen Center for Cancer Care is staffed by certified tumor registrars and cancer registry specialists who have worked under the guidance of Rhonda Griffin, BSN, OCN, Manager IU Health Goshen Center for Cancer Care.
2013 **TOP FIVE SITES**

Breast - Female ....................................... 175  
Lung ........................................................ 68  
Colon/Rectum ......................................... 57  
Melanoma ................................................ 42  
Non-Hodgkin’s Lymphoma ............................ 37

2013 **DISTRIBUTION BY COUNTY**

Out-of-State 6.54%  
Other Indiana Counties 5.5%  
St. Joseph 48.3%  
Kosciusko 18.67%  
Elkhart 4.15%  
LaGrange 6.81%  
Noble 5.19%  
Marshall 3.11%  
Steuben .3%  
Allen 1.48%

2013 **TOP FIVE SITES, STATE & NATIONAL COMPARISON**

**IU Health Goshen**

- 175 Breast
- 68 Lung
- 57 Colon/Rectum
- 42 Melanoma
- 37 Non-Hodgkin’s Lymphoma

**State**

- 4,540 Breast
- 5,500 Lung
- 3,250 Colon/Rectum
- 1,460 Melanoma
- 1,470 Non-Hodgkin’s Lymphoma

**National**

- 232,340 Breast
- 228,190 Lung
- 142,820 Colon/Rectum
- 76,690 Melanoma
- 67,740 Non-Hodgkin’s Lymphoma

* IU Health Goshen Hospital Cancer Registry - analytic cases  
5-Year Comparison of Top Six Sites

**NUMBER OF PATIENTS**

<table>
<thead>
<tr>
<th>Year</th>
<th>Breast</th>
<th>Lung</th>
<th>Prostate</th>
<th>Colon</th>
<th>Melanoma</th>
<th>Non-Hodgkins Lymphoma</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2010</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2011</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2012</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2013</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

INDIANA UNIVERSITY HEALTH GOSHEN CENTER FOR CANCER CARE
## 2013 Primary Sites

<table>
<thead>
<tr>
<th>Site</th>
<th>Total #</th>
<th>Analytic</th>
<th>Non-analytic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Breast</td>
<td>190</td>
<td>175</td>
<td>15</td>
</tr>
<tr>
<td>Lung and Bronchus</td>
<td>78</td>
<td>68</td>
<td>10</td>
</tr>
<tr>
<td>Colon</td>
<td>71</td>
<td>57</td>
<td>14</td>
</tr>
<tr>
<td>Prostate</td>
<td>49</td>
<td>26</td>
<td>23</td>
</tr>
<tr>
<td>Melanoma Skin</td>
<td>49</td>
<td>42</td>
<td>7</td>
</tr>
<tr>
<td>Non-Hodgkin’s Lymphoma</td>
<td>47</td>
<td>37</td>
<td>10</td>
</tr>
<tr>
<td>Pancreas</td>
<td>43</td>
<td>35</td>
<td>8</td>
</tr>
<tr>
<td>Rectum and Rectosigmoid Junction</td>
<td>31</td>
<td>25</td>
<td>6</td>
</tr>
<tr>
<td>Brain/Other Nervous System</td>
<td>29</td>
<td>23</td>
<td>6</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>25</td>
<td>19</td>
<td>6</td>
</tr>
<tr>
<td>Thyroid</td>
<td>24</td>
<td>22</td>
<td>2</td>
</tr>
<tr>
<td>Kidney and Renal Pelvis</td>
<td>21</td>
<td>14</td>
<td>7</td>
</tr>
<tr>
<td>Other Digestive Organs</td>
<td>21</td>
<td>18</td>
<td>3</td>
</tr>
<tr>
<td>Liver</td>
<td>19</td>
<td>14</td>
<td>5</td>
</tr>
<tr>
<td>Corpus Uterus, NOS</td>
<td>19</td>
<td>12</td>
<td>7</td>
</tr>
<tr>
<td>Oral Cavity and Pharynx</td>
<td>15</td>
<td>10</td>
<td>5</td>
</tr>
<tr>
<td>Urinary Bladder</td>
<td>14</td>
<td>12</td>
<td>2</td>
</tr>
<tr>
<td>Lymphocytic Leukemia</td>
<td>11</td>
<td>7</td>
<td>4</td>
</tr>
<tr>
<td>Esophagus</td>
<td>10</td>
<td>8</td>
<td>2</td>
</tr>
<tr>
<td>Stomach</td>
<td>10</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Myeloid and Monocytic Leukemia</td>
<td>10</td>
<td>8</td>
<td>2</td>
</tr>
<tr>
<td>Ovary</td>
<td>9</td>
<td>7</td>
<td>2</td>
</tr>
<tr>
<td>Myeloma</td>
<td>8</td>
<td>8</td>
<td>0</td>
</tr>
<tr>
<td>Soft Tissue Including Heart</td>
<td>6</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>Cervix Uteri</td>
<td>6</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Other Endocrine Including Thymus</td>
<td>5</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td>Hodgkin’s Lymphoma</td>
<td>4</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>Mesothelioma</td>
<td>4</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>Other Respiratory</td>
<td>4</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Small Intestine</td>
<td>3</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Other Urinary Organs</td>
<td>2</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Testis</td>
<td>2</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Anus</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Bones and Joints</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Other Female Genital Organs</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Ureter</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Other Leukemia</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Kaposi Sarcoma</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>TOTALS</strong></td>
<td><strong>844</strong></td>
<td><strong>687</strong></td>
<td><strong>157</strong></td>
</tr>
</tbody>
</table>
Anthony was diagnosed with esophageal cancer in August 2012 and underwent an esophagectomy, chemo and radiation. Throughout it all, he stayed positive – in part due to the support and care he received at the cancer center.

“I’ve spent quite a lot of time there the last few years, and I can say every person I spoke with seemed like they genuinely cared,” he said. “There wasn’t one person with a bad attitude, who wasn’t doing everything they could to help.”

He recalled a time spent in IU Health Goshen Hospital, when Dr. John Abad came to see him at the end of the day before heading out to see how he was doing. After Dr. Abad left, Anthony thought of something else he had wanted to ask. When his nurse reached Dr. Abad, he had already left the hospital.

“He turned around and came back into the hospital to talk to me,” Anthony said. “He easily could have said he was already gone for the day and for me to talk to the doctor on call. But he didn’t even hesitate. Now that is a doctor who cares.”

When talking about his cancer journey, Anthony is quick to praise the cancer center and its collaborative, multi-disciplinary approach to patient care.

“They have committees sitting down, talking and coming up with the best treatments and plan of action. And they follow through,” he explained. “The care I got there – their experience, their dedication – the whole thing. It is a well-run machine.”

Life has changed for Anthony since his diagnosis. Like many others who bear the honor of being called a cancer survivor, he finds himself appreciating life more and focuses on the things that truly matter.

“It changes your outlook, dramatically,” he said. “The little things that might have bothered me before are no big deal now. I live every day for the best I can get out of it.”

As a survivor, Anthony is also sure to tell others about his experience, pointing them toward Goshen if they or a loved one are facing a cancer diagnosis of their own.

“I tell everyone I hear of who is battling cancer – go to Goshen,” he said. “Everyone always thinks that the place where they are going is the best place. But I know where I went really is the best. No question.”

ANTHONY ESOPHAEGAL CANCER SURVIVOR
“Through clinical trials our patients have recently had early access to a number of drugs that now are FDA approved.”
Quality Research Program

Quality research program is an essential attribute of the state-of-the-art cancer center. The need for access to the experimental therapeutic options is emphasized by inability of the standard care to cure or even to produce long-term control for most patients with various cancer diagnoses. Participation in the clinical trials is also considered in the NCCN Guidelines recommendations as the best option of care for many advanced cancers.

Providing access to the state-of-the-art clinical trials is the mission of our research department. Through clinical trials, our patients have recently had early access to a number of drugs that now are FDA approved.

The list of the breakthrough medicines includes ibrutinib (Imbruvica) for treatment of mantle cell lymphoma, obinutuzumab (Gazyva) for treatment of CLL in patients not eligible for cytotoxic chemotherapy, ramucirumab (Cyramza) for treatment of advanced esophageal and gastric cancers, pembrolizumab (Keytruda) for treatment of advanced melanoma, and ceritinib (Zykadia) for treatment of ALK-mutated advanced adenocarcinoma of the lung.

Currently we have a number of promising studies that are seeking patients with the hard-to-treat cancers. For patients with initially unresectable pancreatic cancers, clinical study designed to achieve higher rates of resectability and to test ability of the cancer vaccine to provide improved long-term cure is available. For patients with metastatic pancreatic cancer, we offer studies that use agents targeting fibrosis associated with the pancreatic cancer and designed to increase responses to cytotoxic chemotherapy and ultimately to prolong survival without adding significant additional toxicity.

We also offer a number of the advanced clinical studies that develop concept of the personalized therapy and use agents that target essential components of the cancer cell functioning that have been identified through molecular testing. Another block of the available studies offers revolutionary ways to deliver chemotherapeutics by utilizing novel constructs of the antibody-drug conjugates, thus addressing the promise of selective cancer therapy with ameliorated toxicity profile.

New promising results from these studies have been presented by clinical investigators from our cancer center at many different scientific conferences.

Sincerely,

Alexander Starodub, MD, PhD
Medical Oncology and Clinical Trials Coordinator
IU Health Goshen Center for Cancer Care
Review of Upper Gastrointestinal Cancer Treatment
at IUH Goshen Center for Cancer Care 2011-2013

Standard 4.6
Prepared by Roderich Schwarz, MD, and Urs von Holzen, MD

During the period between 2011 and 2013, 63 patients with a diagnosis of upper gastrointestinal cancer (i.e. of esophageal or gastric origin) were treated at IUH Goshen Center for Cancer Care. Patient records were reviewed to identify clinicopathologic characteristics, therapeutic approaches and outcomes, with special attention placed on adherence of treatment decisions to national guidelines.
There were 52 men (83%) and 11 women (17%), with a median age of 65 years (range: 32 - 92). There were 41 esophageal cancers (65%), 11 cancers of the cardia (17.5%) which according to the most recent AJCC staging criteria are to be staged according to esophageal cancer staging guidelines as well, and 11 gastric primaries (17.5%) (Figure 1). The spectrum of tumor histologies included 50 adenocarcinomas (79%), 6 squamous cell cancers (10%) and 7 others (11%, including 2 GI stromal tumors, 2 lymphomas, 1 carcinoid tumor, 1 small cell cancer and 1 tumor that remained of unknown histologic type as a biopsy was not able to be performed).

Regarding the treatment of the seven patients with “other” diagnoses, there were no deviations from therapy guidelines observed. Of the two patients with GI stromal tumors, one had localized disease, underwent resection and remains free of disease; the other presented with metastatic disease, underwent appropriate targeted therapy, and has since expired. Both lymphoma patients had marginal zone lymphoma of the stomach; one also was diagnosed with a pancreatobiliary adenocarcinoma and underwent therapy for this elsewhere; the other one had resolution of disease with anti-helicobacter therapy, but was found in follow-up to have an adenocarcinoma of the stomach that was since treated with perioperative chemotherapy and curative-intent gastrectomy. He remains alive and well. The patient with carcinoid was found to have a small, low-grade gastric tumor that underwent endoscopic removal only; she has remained free of disease. The patient with small cell cancer had a distal esophageal primary and biopsy-proven liver metastases; she underwent systemic chemotherapy, but expired after 2 months. Finally, the patient with unidentified histology was suspected to have esophageal adenocarcinoma with widely metastatic disease at presentation; he declined biopsy or treatment recommendations, and expired after less than 2 months.

The 56 patients with adenocarcinomas or squamous cell cancers were analyzed in more detail, as not only adherence to specific evidence-based treatment guidelines for these conditions could be assessed, but also aggregate outcomes could be reported due to the sufficient size of the cohort. This cohort was comprised of 50 adenocarcinomas with primary sites in the esophagus (n=34), cardia (n=10) or stomach (n=6), and 6 squamous cell cancers with primary sites in the esophagus (n=5) or cardia (n=1). Given the definition of the esophagogastric junction encompassing the area of 5 cm above and below the gastric cardia, 48 of these tumors originated within the EG junction (86%). The stage distribution included 5 tumors of stage I (9%), 11 of stage II (20%), 18 of stage III (32%) and 22 of stage IV disease (39%) (Figure 2). Surgical resection was performed in 4 patients with stage I
disease (80%), 7 with stage II disease (64%), 11 with stage III disease (61%) and none of stage IV patients. Of the 34 patients with potentially curable, stage I-III disease, 12 did not undergo a resection. Reasons for this included prohibitive comorbid conditions in 6, concerns over disease extent or progression during induction therapy in 3, presence of a synchronous second primary cancer in 1 and patient refusal in 2 cases.

Systemic chemotherapy was administered in 3 patients with stage I disease (60%), all 11 patients with stage II disease, 16 with stage III disease (89%) and 16 patients with stage IV disease (73%). All patients who received systemic chemotherapy for early-stage disease either had a squamous cell carcinoma histology, T1/T2 disease with nodal involvement on clinical staging or a more advanced clinical stage than confirmed pathologically after resection. Six patients with stage IV disease did not receive chemotherapy; none of these underwent resection, and two were treated with palliative radiation.

Radiation therapy was administered in 3 patients with stage I disease (60%), 9 patients with stage II disease (82%), 15 with stage III disease (83%) and 6 patients with stage IV disease (27%). Of 23 patients who did not receive radiation, 4 underwent resection for early stage disease, 2 with stage III disease refused therapy, 1 with stage III disease underwent resection, and all others had stage IV disease. Six of 33 patients who received radiation had stage IV disease; four of these received chemotherapy as well, while two did not (one expired 3 weeks after radiation start, the other one within two months after radiation).

Eighteen of 22 patients (81%) who underwent tumor resection carried significant other health conditions unrelated to the upper GI cancer, reflecting the significant challenge with comorbidity in this patient cohort. All but one operative resections were performed with curative intent (95%). One of the gastroesophageal resections was performed through a minimally invasive surgical approach, all others were open procedures. Postoperative complications have been documented in 56% of patients after tumor resection; there was one lethal event during the postoperative hospital stay or within 30 days (4.5%). The median length of hospital stay after resection was 10 days (range: 7 - 33 days). In 23% of patients who underwent resection after preoperative chemoradiation a pathologic complete response was identified in the specimen. The median lymph node count after esophagogastrectomy was 18 (range: 3-33).

At a median follow-up of 13.2 months (19.1 for surviving patients), the median overall survival has been 18.6 months after diagnosis. Patients with potentially curative disease (stages I - III)
had an overall survival of 22.2 months at the median level, with a one-year survival of 73%, 2-year survival of 42% and 3-year survival of 35%. Patients with incurable, stage IV disease had an overall survival of 17.6 months at the median level, with a one-year survival of 57%, 2-year survival of 20% and 3-year survival of 10%. Among the 34 patients with stage I-III disease, survival was superior in patients who underwent resection as part of their therapy (p=0.01), with differences in OS observed at the 1-year (76 versus 58%), 2-year (63 versus 10%) and 3-year mark (50 versus 10%) (Figure 3).

Current national treatment guidelines for esophageal and gastric adenocarcinomas or squamous cell carcinomas support multimodality therapy for suspected or proven mid-stage disease, with a preference for preoperative chemoradiation for esophageal cancers (trimodality therapy), and the options of perioperative chemotherapy, preoperative chemoradiation or possibly postoperative chemoradiation for gastric tumors. Guidelines also support curative intent resection in cases of medical operability or possibly definitive chemoradiation for early stage cancers, and systemic chemotherapy for stage IV disease, with local therapy options in the presence of metastatic cancer for symptom control. In the patient cohort reviewed, no obvious deviations from these guidelines were identified.