

# HEMATOLOGIC MALIGNANCIES

## LYMPH NODES AND LYMPHATIC STRUCTURES ABOVE AND BELOW THE DIAPHRAGM

**Note:** The most common terms are included in this table. For a more complete listing of lymph nodes, see **Appendix I**.

ABOVE THE DIAPHRAGM	BELOW THE DIAPHRAGM
Axillary	Celiac
Brachial (lateral axillary)	Colic
Buccal (buccinator)	Femoral (superficial, inguinal)
Cervical, NOS	Gastric
Epitrochlear	Hepatic
Facial	Ileocolic
Hilar (bronchopulmonary)	Iliac
Infraclavicular (subclavicular)	Inguinal
Internal jugular	Internal iliac (hypogastric)
Mastoid (post-/retro-auricular)	Mesenteric
Mediastinal	Obturator
Occipital	Pancreatic
Para/peritracheal	Para-aortic
Parasternal (internal mammary)	Peyer's patches
Parotid	Popliteal
Pectoral (anterior axillary)	Porta hepatis (portal)
Posterior triangle (spinal accessory)	Pyloric
Preauricular	Retroperitoneal
Prelaryngeal	Sacral
Retropharyngeal	Spleen
Scalene (inferior deep cervical)	Splenic (lineal)
Sublingual	
Submandibular (submaxillary)	
Submental	
Subscapular (posterior axillary)	
Supraclavicular (transverse cervical)	
Tonsil	
Thymus	
Waldeyer ring [ring of lymphoid tissue formed by the two palatine tonsils, the pharyngeal tonsil (adenoids) and the lingual tonsil]	

# HEMATOLOGIC MALIGNANCIES

## LYMPHOMA

9590, 9596-9663, 9673-9699, 9702-9719, 9725-9726, 9735, 9737-9738, 9823, 9826-9827 (varying primary sites and histologies)

- See *Summary Stage 2018 Manual, Appendix III* for a detailed listing of primary site/histology combinations for this schema

9591 and Schema Discriminator 1: 3, 9 (C000-C440, C442-C689, C691-C694, C698-C809)

**Note 1:** The following sources were used in the development of this chapter

- SEER Extent of Disease 1988: Codes and Coding Instructions (3rd Edition, 1998) (<https://seer.cancer.gov/archive/manuals/EOD10Dig.3rd.pdf>)
- SEER Summary Staging Manual-2000: Codes and Coding Instructions (<https://seer.cancer.gov/tools/ssm/>)
- Collaborative Stage Data Collection System, version 02.05: <https://cancerstaging.org/cstage/Pages/default.aspx>
- Chapter 79 *Hodgkin and Non-Hodgkin Lymphomas*, in the AJCC Cancer Staging Manual, Eighth Edition (2017) published by Springer International Publishing. Used with permission of the American College of Surgeons, Chicago, Illinois.
- Chapter 80 *Pediatric Hodgkin and Non-Hodgkin Lymphomas*, in the AJCC Cancer Staging Manual, Eighth Edition (2017) published by Springer International Publishing. Used with permission of the American College of Surgeons, Chicago, Illinois.

**Note 2:** See the following schemas for the listed histologies

- C441, C690, C695-C696 (9590-9699, 9702-9719, 9725-9726, 9735, 9737-9738, 9823, 9826-9827): *Lymphoma Ocular Adnexa*
- C440, C442-C449, C510, C609, C632 (9597, 9680, 9708-9709, 9712, 9718-9719, 9726): *Primary Cutaneous Lymphomas*
- C700, C710-C719 (9680, 9699, 9700-9714): *Brain*
- C701, C709, C720-C725, C728-C729 (9680, 9699, 9700-9714): *CNS Other*
- C751-C753 (9680, 9699, 9700-9714): *Intracranial Gland*
- 9591 and Schema Discriminator 1: 1, 2 (C000-C440, C442-C689, C691-C694, C698-C809): *HemeRetic*

**Note 3:** Chapter includes the preferred terms based on the *2017 WHO Classification of Haematopoietic and Lymphoid Tissues*

9590 Malignant lymphoma, NOS

9591 Non-Hodgkin lymphoma, NOS

9596 B-cell lymphoma, unclassifiable, with features intermediate between DLBCL and classic Hodgkin lymphoma

9597 Primary cutaneous follicle centre lymphoma  
 9650 Classical Hodgkin lymphoma  
 9651 Lymphocyte-rich classic Hodgkin lymphoma  
 9652 Mixed cellularity classic Hodgkin lymphoma  
 9653 Lymphocyte-depleted classic Hodgkin lymphoma  
 9659 Nodular lymphocyte predominant Hodgkin lymphoma  
 9663 Nodular sclerosis classic Hodgkin lymphoma  
 9673 Mantle cell lymphoma  
 9678 Primary effusion lymphoma  
 9679 Primary mediastinal (thymic) large B-cell lymphoma  
 9680 Diffuse large B-cell lymphoma (DLBCL)  
 9687 Burkitt lymphoma  
 9688 T-cell/histiocyte-rich large B-cell lymphoma  
 9689 Splenic marginal zone lymphoma  
 9690 Follicular lymphoma  
 9691 Follicular lymphoma, grade 2  
 9695 Follicular lymphoma, grade 1  
 9698 Follicular lymphoma, grade 3  
 9699 Extranodal marginal zone lymphoma of mucosa-associated lymphoid tissue (MALT lymphoma)  
 9702 Peripheral T-cell lymphoma, NOS  
 9705 Angioimmunoblastic T-cell lymphoma  
 9708 Subcutaneous panniculitis-like T-cell lymphoma  
 9709 Primary cutaneous peripheral T-cell lymphomas  
 9712 Intravascular large B-cell lymphoma  
 9714 Anaplastic large cell lymphoma, ALK-positive  
 9716 Hepatosplenic T-cell lymphoma  
 9717 Enteropathy-associated T-cell lymphoma  
 9718 Primary cutaneous anaplastic large cell lymphoma  
 9719 Extranodal NK/T-cell lymphoma, nasal type  
 9725 Hydroa vacciniforme-like lymphoma  
 9726 Primary cutaneous gamma-delta T-cell lymphoma  
 9735 Plasmablastic lymphoma  
 9737 ALK-positive large B-cell lymphoma  
 9738 HHV8-positive DLBCL, NOS  
 9823 Chronic lymphocytic leukemia (CLL)/small lymphocytic lymphoma  
 9826 Burkitt cell leukemia  
 9827 Adult T-cell leukemia/lymphoma

## **SUMMARY STAGE**

### **1 Localized only**

- Involvement of multiple nodal chains in the SAME lymph node region
- Multifocal involvement of one extralymphatic organ/site (except lung/liver) WITHOUT nodal involvement

- Single extralymphatic site WITHOUT nodal involvement
- Single lymph node region involved

## **2 Regional, NOS**

- Bulky disease present
- Contiguous extension between extralymphatic sites and regional nodes
  - WITH or WITHOUT involvement of other nodal regions on SAME side of diaphragm
- Localized involvement of a single extralymphatic organ/site
  - WITH involvement of its regional lymph node(s) OR
  - WITH involvement of other lymph node(s) on the SAME side of the diaphragm
- Two or more lymph node regions involved SAME side of diaphragm

## **7 Distant site(s)/lymph node(s) involved**

- Distant involvement
  - Diffuse or disseminated (multifocal) involvement of ONE extralymphatic organ/site
    - WITH associated lymph node involvement OR
  - Diffuse or disseminated (multifocal) involvement of ONE or MORE extralymphatic organ(s)/site(s)
    - WITH or WITHOUT associated lymph node involvement
  - Involvement of isolated extralymphatic organ in absence of involvement of adjacent lymph nodes, but in conjunction with disease in distant sites
  - Involvement of lymph node regions on BOTH sides of the diaphragm
    - OR nodes ABOVE the diaphragm involved WITH spleen involvement
  - Multifocal involvement of one extralymphatic organ/site WITH nodal involvement
  - Noncontiguous extralymphatic organ involvement in conjunction with nodal disease (two or more sites involved)
- Distant metastasis, NOS
  - Bone marrow
  - Cerebrospinal fluid (CSF)
  - Liver
  - Lung (other than by direct extension in code 2)

## **9 Unknown if extension or metastasis**

## MYCOSIS FUNGOIDES

9700-9701 (C000-C002, C006, C440-C449, C510-C512, C518-C519, C600-C602, C608-C609, C632)

**Note 1:** The following sources were used in the development of this chapter

- SEER Extent of Disease 1988: Codes and Coding Instructions (3rd Edition, 1998) (<https://seer.cancer.gov/archive/manuals/EOD10Dig.3rd.pdf>)
- SEER Summary Staging Manual-2000: Codes and Coding Instructions (<https://seer.cancer.gov/tools/ssm/>)
- Collaborative Stage Data Collection System, version 02.05: <https://cancerstaging.org/cstage/Pages/default.aspx>
- Chapter 81 *Primary Cutaneous Lymphomas*, in the AJCC Cancer Staging Manual, Eighth Edition (2017) published by Springer International Publishing. Used with permission of the American College of Surgeons, Chicago, Illinois.

**Note 2:** For mycosis fungoides of sites other than those above, use the appropriate site-specific schema.

**Note 3:** Code 0 is not applicable for this chapter.

**Note 4:** All lymph node (regional and distant) involvement is coded as regional lymph node involvement.

**Note 5:** Visceral involvement is metastatic disease and should be questioned in the absence of node or blood involvement.

## SUMMARY STAGE

### 1 Localized only (localized, NOS)

- MFCCG Stage I
  - Less than 10% of skin surface, no tumors
  - Limited to patches, papules, or plaques
- MFCCG Stage II
  - Greater than or equal to 10% of skin surface, no tumors
  - Generalized patches, papules, or plaques
- Not stated whether patches, papules, or plaques
  - % of body surface not stated, no tumors
  - Skin involvement, NOS: extent not stated, no tumors

## **2 Regional by direct extension only**

- MFCG Stage III
  - Cutaneous tumor, size not stated
  - Generalized erythroderma (confluence of erythema)
    - (greater than 50% of body involved with diffuse redness)
  - One or more tumors equal to 1 cm or greater
  - Sezary syndrome
  - Skin lesion described as tumor less than 1 cm

## **3 Regional lymph node(s) involved only**

- Both clinically enlarged palpable lymph node(s) (adenopathy) AND
  - pathologically positive nodes
- Clinically enlarged palpable lymph node(s) (adenopathy) AND
  - either pathologically negative nodes or no pathological statement
- No clinically enlarged palpable lymph node(s) (adenopathy) BUT
  - pathologically positive lymph node(s)
- Dutch grade 1-4 OR NCI LN 0-4
  - Clone positive, negative or unknown
- Regional lymph node(s), NOS
  - Lymph node(s), NOS

## **4 Regional by BOTH direct extension AND regional lymph node(s) involved**

- Codes (2) + (3)

## **7 Distant site(s) involved**

- Distant site(s) (including further contiguous extension)
  - MFCG Stage IV
    - Bone marrow
    - Involvement by at least one organ outside the skin, nodes, blood, or bone marrow
    - Liver
    - Spleen
    - Visceral (non-cutaneous, extranodal) involvement, pathologically confirmed
- Distant metastasis, NOS
  - Carcinomatosis

## **9 Unknown if extension or metastasis**

## PRIMARY CUTANEOUS LYMPHOMAS (EXCLUDING MF AND SS)

9597, 9680, 9708-9709, 9712, 9718-9719, 9726

C440, C442-C449, C510, C609, C632

C440 Skin of lip, NOS

C442 External ear

C443 Skin of other and unspecified parts of face

C444 Skin of scalp and neck

C445 Skin of trunk

C446 Skin of upper limb and shoulder

C447 Skin of lower limb and hip

C448 Overlapping lesion of skin

C449 Skin, NOS

C510 Labium majus

C609 Penis

C632 Scrotum, NOS

**Note 1:** The following sources were used in the development of this chapter

- SEER Extent of Disease 1988: Codes and Coding Instructions (3rd Edition, 1998) (<https://seer.cancer.gov/archive/manuals/EOD10Dig.3rd.pdf>)
- SEER Summary Staging Manual-2000: Codes and Coding Instructions (<https://seer.cancer.gov/tools/ssm/>)
- Collaborative Stage Data Collection System, version 02.05: <https://cancerstaging.org/cstage/Pages/default.aspx>
- Chapter 81 *Primary Cutaneous Lymphomas*, in the AJCC Cancer Staging Manual, Eighth Edition (2017) published by Springer International Publishing. Used with permission of the American College of Surgeons, Chicago, Illinois.

**Note 2:** Code 0 is not applicable for this chapter.

**Note 3:** See the *Mycosis Fungoides* chapter for Mycosis Fungoides (9700) and Sezary syndrome (9701).

**Note 4:** Chapter includes the preferred terms based on the 2017 *WHO Classification of Haematopoietic and Lymphoid Tissues*

9597 Primary cutaneous follicle center lymphoma

9680 Primary cutaneous diffuse large B-cell lymphoma, leg type

9708 Subcutaneous panniculitis-like T-cell lymphoma

9709 Primary cutaneous peripheral T-cell lymphomas

9712 Intravascular large B-cell lymphoma

9718 Primary cutaneous anaplastic large cell lymphoma

9719 Extranodal NK/T-cell lymphoma, nasal type

9726 Primary cutaneous gamma-delta t-cell lymphoma

## **SUMMARY STAGE**

### **1 Localized only**

- Solitary lesion
- Solitary skin involvement

### **2 Regional by direct extension only**

- Multiple lesions confined to one or two contiguous body regions
- Multiple lesions, NOS
- Regional skin involvement

### **3 Regional lymph node(s) involved only**

- Cervical
- Peripheral node region that drains an area of current or prior skin involvement
- Regional lymph node(s), NOS
  - Lymph node(s), NOS

### **4 Regional by BOTH direct extension AND regional lymph node(s) involved**

- Codes (2) + (3)

### **7 Distant site(s)/lymph node(s) involved**

- Distant site(s) (including further contiguous extension)
  - Extracutaneous non-lymph node disease present
  - Generalized skin involvement
  - Multiple lesions confined to discontinuous body regions
  - Multiple lesions confined to three or more contiguous body regions
  - Visceral (non-cutaneous) metastasis
- Distant lymph node(s), NOS
- Distant metastasis, NOS
  - Carcinomatosis
  - Distant metastasis WITH or WITHOUT distant lymph node(s)

### **9 Unknown if extension or metastasis**



## MYELOMA AND PLASMA CELL DISORDERS

9671 Lymphoplasmacytic lymphoma (except C441, C690, C695-C696)  
9731 Plasmacytoma, NOS  
9732 Plasma cell myeloma/multiple myeloma  
9734 Plasmacytoma, extramedullary (except C441, C690, C695-C696)  
9761 Waldenstrom Macroglobulinemia

**Note 1:** The following sources were used in the development of this chapter

- SEER Extent of Disease 1988: Codes and Coding Instructions (3rd Edition, 1998) (<https://seer.cancer.gov/archive/manuals/EOD10Dig.3rd.pdf>)
- SEER Summary Staging Manual-2000: Codes and Coding Instructions (<https://seer.cancer.gov/tools/ssm/>)
- Collaborative Stage Data Collection System, version 02.05: <https://cancerstaging.org/cstage/Pages/default.aspx>
- Chapter 82 *Plasma Cell Myeloma and Plasma Cell Disorder*, in the AJCC Cancer Staging Manual, Eighth Edition (2017) published by Springer International Publishing. Used with permission of the American College of Surgeons, Chicago, Illinois.

**Note 2:** Codes 0, 2, and 4 are not applicable for this chapter.

**Note 3:** Plasma cell myeloma/multiple myeloma (9732) is a widely disseminated plasma cell neoplasm, characterized by a single clone of plasma cells derived from B cells that grows in the bone marrow. It is always coded to 7 for systemic involvement.

**Note 4:** Lymphoplasmacytic lymphoma (9671) and Waldenstrom Macroglobulinemia (9761) are now collected with the plasma cell disorders. These are systemic diseases and should always be coded 7.

### SUMMARY STAGE

#### 1 Localized only

- Single plasmacytoma occurring in bone (osseous or medullary) (9731)
  - WITH or WITHOUT soft tissue extension
- Single plasmacytoma, NOS (9734)
  - Single plasmacytoma occurring outside of bone (extraosseous or extramedullary) (9731)

#### 3 Regional lymph node(s) involved only

- Extraosseous plasmacytomas only (9734)
  - Regional lymph node(s), NOS
    - Lymph node(s), NOS

## **7 Distant site(s)/lymph node(s) involved**

- Lymphoplasmacytic lymphoma (9671)
- Plasmacytomas (9731, 9734)
  - Multiple extraosseous or extramedullary plasmacytomas (9734)
  - Multiple osseous or medullary plasmacytomas (9731)
  - Multiple plasmacytomas, NOS (9731, 9734)
- Plasma cell myeloma (9732)
  - Multiple myeloma
  - Myeloma, NOS
- Waldenstrom Macroglobulinemia (9761)

## **9 Unknown if extension or metastasis (applicable for 9731 and 9734 only)**

## HEMERETIC

9724, 9727, 9740-9742, 9762-9809, 9811-9820, 9831-9920, 9931-9992

9591 and Schema Discriminator 1: 1, 2 (C000-C440, C442-C689, C691-C694, C698-C809)

9751, 9755-9759 (C000-C699, C739-C750, C754-C809)

9930 (C000-C440, C442-C689, C691-C694, C698-C809)

**Note 1:** The following sources were used in the development of this chapter

- SEER Extent of Disease 1988: Codes and Coding Instructions (3rd Edition, 1998) (<https://seer.cancer.gov/archive/manuals/EOD10Dig.3rd.pdf>)
- SEER Summary Staging Manual-2000: Codes and Coding Instructions (<https://seer.cancer.gov/tools/ssm/>)
- Collaborative Stage Data Collection System, version 02.05: <https://cancerstaging.org/cstage/Pages/default.aspx>
- Chapter 83 *Leukemia*, in the AJCC Cancer Staging Manual, Eighth Edition (2017) published by Springer International Publishing. Used with permission of the American College of Surgeons, Chicago, Illinois.

**Note 2:** See the following schemas for the listed histologies

- 9591 and Schema Discriminator 1: 3, 9 (C000-C440, C442-C689, C691-C694, C698-C809): *Lymphoma*
- 9751, 9755-9759 (C700, C710-C719): *Brain*
- 9751, 9755-9759 (C701, C709, C720-C725, C728-C729): *CNS Other*
- 9751, 9755-9759 (C751-C753): *Intracranial Gland*
- 9930 (C441, C690, C695-C696): *Lymphoma Ocular Adnexa*

**Note 3:** The following histologies can be localized (code 1), systemic (7) or unknown (9)

9740 Mast cell sarcoma

9751 Langerhans cell histiocytosis, disseminated (except C700-C729, C751-C753)

9755 Histiocytic sarcoma (except C700-C729, C751-C753)

9756 Langerhans cell sarcoma (except C700-C729, C751-C753)

9757 Interdigitating dendritic cell sarcoma (except C700-C729, C751-C753)

9758 Follicular dendritic cell sarcoma (except C700-C729, C751-C753)

9759 Fibroblastic reticular cell tumor (except C700-C729, C751-C753)

9930 Myeloid sarcoma (except C441, C690, C695-C696)

9971 Polymorphic PTLN

**Note 4:** For histologies listed in **Note 2**, it is possible to have lymph node involvement; however, at this time, lymph node involvement for these histologies is not collected.

**Note 5: The following histologies are systemic (code 7):**

9591 Splenic B-cell lymphoma/leukemia, unclassifiable (except C441, C690, C695-C696)  
9724 Systemic EBV-positive T-cell lymphoma of childhood  
9727 Blastic plasmacytoid dendritic cell neoplasm  
9741 Systemic mastocytosis with an associated hematological neoplasm  
9742 Mast cell leukemia  
9762 Heavy chain diseases  
9800 Leukemia, NOS  
9801 Acute undifferentiated leukemia  
9806 Mixed-phenotype acute leukemia with t(9;22)(q34.1;q11.2); *BCR-ABL1*  
9807 Mixed-phenotype acute leukemia with t(v;11q23.3); *KMT2A*-rearranged  
9808 Mixed -phenotype acute leukemia, B/myeloid, NOS  
9809 Mixed-phenotype acute leukemia, T/myeloid, NOS  
9811 B-lymphoblastic leukemia/lymphoma, NOS  
9812 B-lymphoblastic leukemia/lymphoma with t(9;22)(q34.1;q11.2); *BCR-ABL1*  
9813 B-lymphoblastic leukemia/lymphoma with t(v;11q23.3); *KMT2A*-rearranged  
9814 B-lymphoblastic leukemia/lymphoma with t(12;21)(p13.2;q22.1); *ETV6-RUNX1*  
9815 B-lymphoblastic/lymphoma with hyperdiploidy  
9816 B-lymphoblastic/lymphoma with hypodiploidy (hypodiploid ALL)  
9817 B-lymphoblastic/lymphoma with t(5;14)(q31.1;q32.1); *IGH/IL3*  
9818 B-lymphoblastic/lymphoma with t(1;19)(q23;p13.3); *TCF3-PBX1*  
9820 Lymphoid leukemia, NOS  
9831 T-cell large granular lymphocytic leukemia  
9832 Prolymphocytic leukemia, NOS  
9833 B-cell prolymphocytic leukemia  
9834 T-cell prolymphocytic leukemia  
9837 T-lymphoblastic leukemia/lymphoma  
9840 Pure erythroid leukemia  
9860 Myeloid leukemia, NOS  
9861 Acute myeloid leukemia, NOS  
9863 Chronic myeloid leukemia  
9865 Acute myeloid leukemia with t(6;9)(p23;q34.1); *DEK-NUP214*  
9866 Acute promyelocytic leukemia with *PML-RARA*  
9867 Acute myelomonocytic leukemia  
9869 Acute myeloid leukemia with inv(3)(q21.3q26.2) or t(3;3)(q21.3;q26.2); *RBM15-MKLI*  
9870 Acute basophilic leukemia  
9871 Acute myeloid leukemia with inv(16)(p13.1q22) or t(16;16)(p13.1;q22); *CBFB-MYH11*  
9872 Acute myeloid leukemia, minimal differentiation  
9873 Acute myeloid leukemia without maturation  
9874 Acute myeloid leukemia with maturation  
9875 Chronic myeloid leukemia, *BCR-ABL1*-positive  
9876 Atypical chronic myeloid leukemia *BCR-ABL1*-negative  
9891 Acute monoblastic and monocytic leukemia  
9895 Acute myeloid leukemia with myelodysplasia-related changes  
9896 Acute myeloid leukemia with t(8;21)(q22;q22.1), *RUNX1-RUNX1T1*

9897 Acute myeloid leukemia with t(9;11)(p21.3;q23.3); *KMT2A-MLLT3*  
 9898 Myeloid leukemia associated with Down Syndrome  
 9910 Acute megakaryoblastic leukemia  
 9911 Acute myeloid leukemia (megakaryoblastic) with t(1;22)(p13.3;q13.1); *RBM15-MKLI*  
 9920 Therapy-related myeloid neoplasms  
 9931 Acute panmyelosis with myelofibrosis  
 9940 Hairy cell leukemia  
 9945 Chronic myelomonocytic leukemia, NOS  
 9946 Juvenile myelomonocytic leukemia  
 9948 Aggressive NK-cell leukemia  
 9950 Polycythemia vera  
 9961 Primary myelofibrosis  
 9962 Essential thrombocythemia  
 9963 Chronic neutrophilic leukemia  
 9964 Chronic eosinophilic leukemia, NOS  
 9965 Myeloid/lymphoid neoplasms with *PDGFRA* rearrangement  
 9966 Myeloid/lymphoid neoplasm with *PDGFRB* rearrangement  
 9967 Myeloid/lymphoid neoplasm with *FGFR1* rearrangement  
 9975 Myelodysplastic/myeloproliferative neoplasm, unclassifiable  
 9980 Myelodysplastic syndrome with single lineage dysplasia  
 9982 Myelodysplastic syndrome with ring sideroblasts and single lineage dysplasia  
 9983 Myelodysplastic syndrome with excess blasts  
 9985 Myelodysplastic syndrome with multilineage dysplasia  
 9986 Myelodysplastic syndrome with isolated del(5q)  
 9989 Myelodysplastic syndrome, unclassifiable  
 9991 Refractory neutropenia  
 9992 Refractory thrombocytopenia

**Note 5:** Summary Stage is the only applicable staging system for this site/histology/schema.

**Note 6:** Codes 0, 2, 3, 4, and 5 are not applicable for this chapter.

## **SUMMARY STAGE**

### **1 Localized only**

- Localized disease
- (Single/solitary/unifocal/isolated)
- See Notes 2 and 3

### **7 Distant site(s)/lymph node(s) involved**

- Systemic disease
- See Note 4

### **9 Unknown if extension or metastasis**