高雄榮民總醫院

皮膚癌(BCC)診療原則

修訂日期:2023.05.23

Reference: NCCN Clinical Practice Guideline in OncologyTM ,Skin cancer, V.1.2019

BCC診療指引審視修訂會議討論日期

- 上次會議： 2022/04/19

上一版	新版
附件為:NCCN Guidelines 2021年版	更換附件為:NCCN Guidelines 2023年版

基底細胞癌(BCC)

高雄榮民總醫院
臨床診療指引 2023第一版

診斷	初步評估	分期	初始治療	療效評估	輔助治療	追蹤

臨床診斷之可疑病灶，經皮膚切片及病理組織學證實。

1、病史
2、理學檢查
(1)完整皮膚檢查
(2)淋巴結檢查
3、影像學檢查§
(1)CXR
(2)CT
(3)MRI
由主治醫師判定是否需要做

侷限型#

Low risk☆
- curettage & electrodesiccation
- excision
  - margin positive
    - Moh's surgery
    - Wide excision
    - RT△
  - margin negative
- RT△ ± Cryotherapy if not OP

High risk☆
- wide excision
  - margin positive
    - Moh's surgery
    - RT△
  - margin negative
- Moh's surgery
  - margin positive
    - RT△
  - margin negative
    - RT△ if large-nerve involvement
- RT△ if not OP

擴散型+
- Palliative symptom management
- clinical trial or Vismodegib

若仍有殘存病灶但已無法進行手術或放射線治療者，建議Palliative symptom management or clinical trial or Vismodegib or Cryotherapy

Monthly*III
↓
Quarterly*III
↓
6 months*II
↓
Yearly for life
Or
Palliative care
（安寧緩和）

§： Image studies is indicated for extensive disease (deep structural involvement such as bone, deep soft tissue, perineural disease)

＋： regional or distal metastatic disease(初始皮膚病灶治療同侷限型）

☆：附件一

△：附件二

＃： T any, N0, M0(附件三）

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NCCN Guidelines Version 1.2023
Basal Cell Skin Cancer

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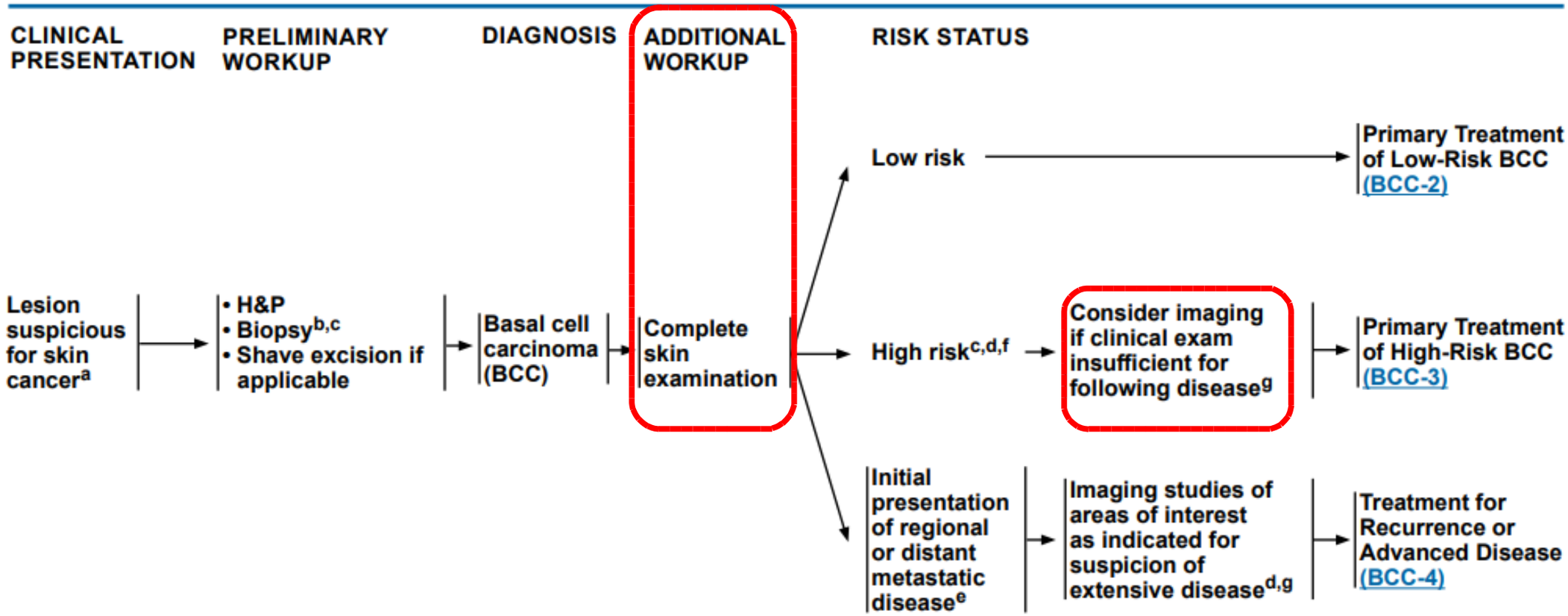
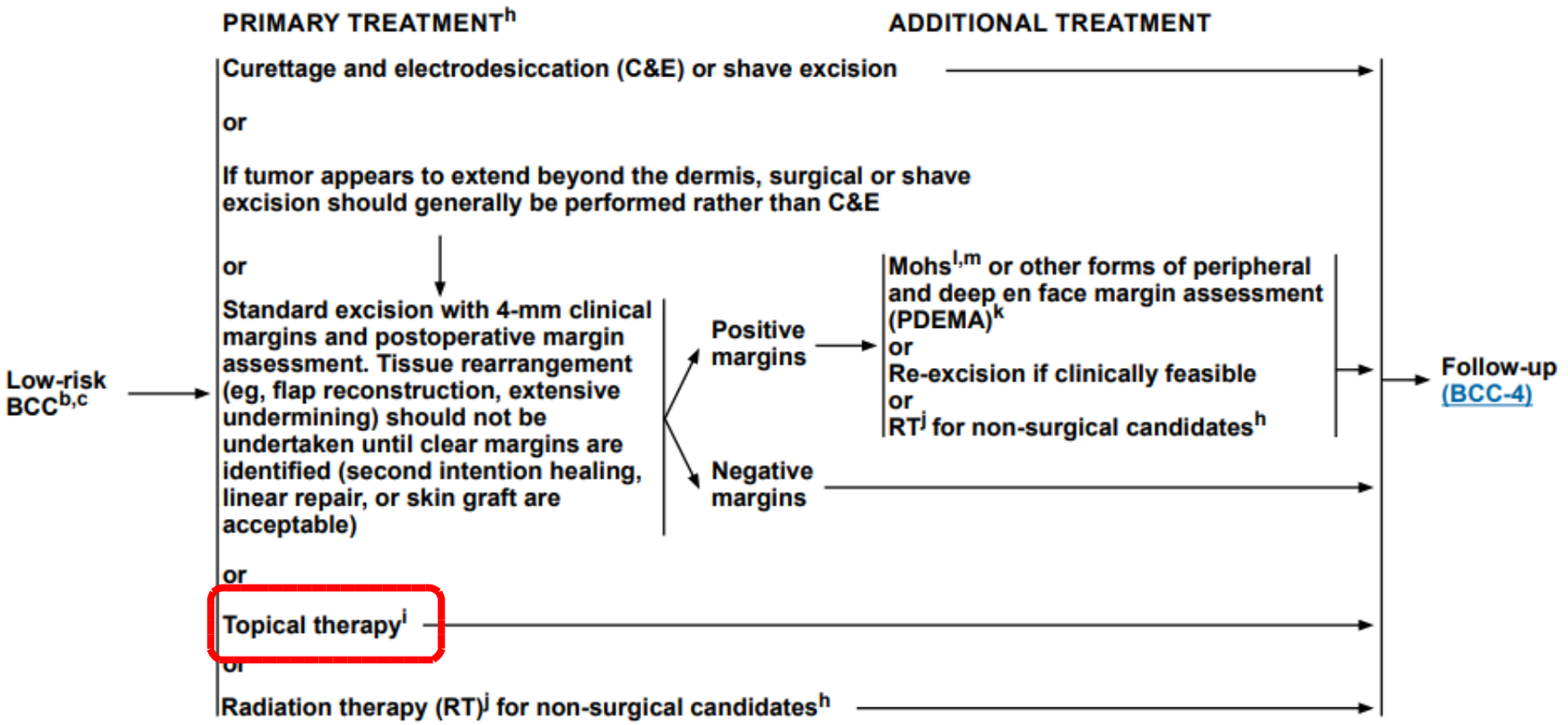


BCC-1

- *Preliminary* Workup:
  - Bullet removed: Complete skin exam.
  - Bullet added: Shave excision if applicable.
- New option header added: Additional Workup
  - New option added: Complete skin examination.
- Risk Status, middle pathway following High risk, new option added: Consider imaging if clinical exam insufficient for following disease.
- Footnote d revised: Extensive disease includes deep ~~structural~~ involvement such as bone, *named nerves* ~~perineural disease~~, and deep soft tissue. If ~~perineural~~ disease *of named nerve(s)* is suspected, MRI with contrast is preferred. If bone disease is suspected, CT with contrast is preferred unless contraindicated.



[b] Principles of Pathology (BCC-A).
[c] Risk Factors for Recurrence (BCC-B).
[h] Principles of Treatment (BCC-C).
[i] In patients with superficial basal cell skin cancer, therapies such as topical imiquimod, topical 5-fluorouracil, photodynamic therapy, or cryotherapy may be considered, although cure rates are approximately 10% lower than for surgical treatment modalities. Jansen MHE, et al. J Invest Dermatol 2018;138:527-533. Drew BA, et al. Dermatol Surg 2017;43:1423-1430.
[j] Principles of Radiation Therapy (BCC-D).
[k] PDEMA with permanent section analysis or intraoperative frozen section analysis is an alternative to Mohs. See Principles of PDEMA Technique (SCC-G). Mohs surgery should be performed by dermatologic surgeons who have specialized training and experience in this procedure.
[m] As per other appropriate use criteria. Task Force/Committee Members, Vidal CI, Armbrect EA, Andrea AA, et al. J Am Acad Dermatol 2019;80:189-207.e11.

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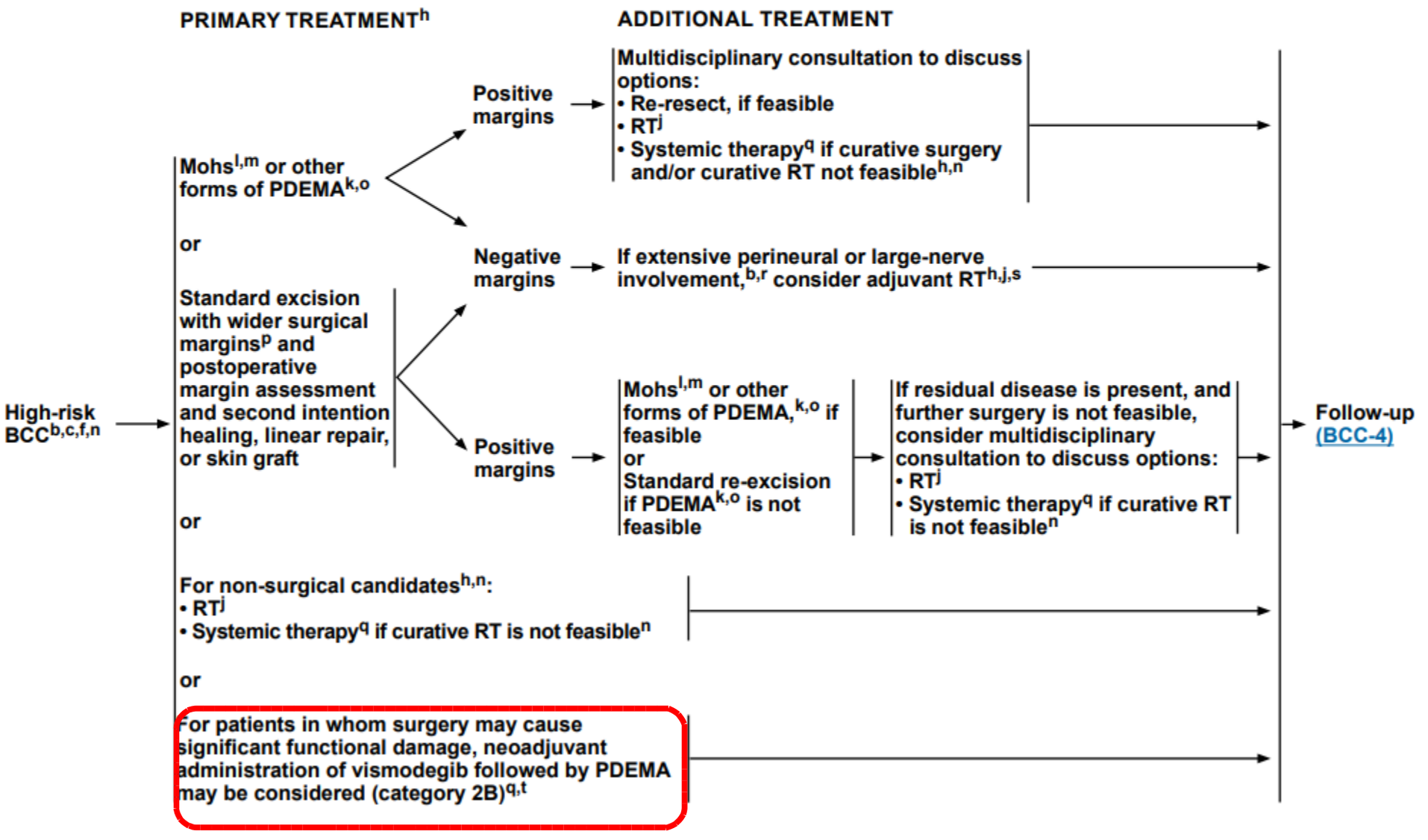
BCC-2
- Primary Treatment:
  - Top option revised: Curettage and electrodisiccation (C&E) *or shave excision:* ~~Excluding terminal hair-bearing areas, such as the scalp, pubic and axillary regions, and beard area in males.~~ *or.*
  - Second option revised: If tumor appears to extend beyond the dermis, surgical *or shave* excision should generally be performed rather than C&E.
  - New option added: Topical therapy.
- Footnote removed: For tumors on cheeks, forehead, scalp, neck, and pretibia that are <6 mm in depth and confined to the dermis, C&E may be considered as an alternative primary treatment option if Mohs, resection with PDEMA, and standard excision are not feasible due to patient comorbidities. See Risk Factors for Recurrence (BCC-B).
- New footnotes added:
  - Footnote l: Mohs surgery should be performed by dermatologic surgeons who have specialized training and experience in this procedure. (Also page BCC-3A)
  - Footnote m: As per other appropriate use criteria. Task Force/Committee Members, Vidal CL, Armbrect EA, Andrea AA, et al. J Am Acad Dermatol 2019;80:189-207.e11. (Also page BCC-3A)



Footnotes on BCC-3A

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STRATIFICATION TO DETERMINE TREATMENT OPTIONS FOR LOCAL BCC BASED ON RISK FACTORS FOR RECURRENCE[a]

Risk Group	Low Risk	High Risk
Treatment options	BCC-2	BCC-3
H&P		
Location/size	Trunk, extremities <2 cm	Trunk, extremities ≥2 cm
		Head, neck, hands, feet, pretibia, and anogenital (any size)[c]
Borders	Well-defined	Poorly defined
Primary vs. recurrent	Primary	Recurrent
Immunosuppression	(-)	(+)
Site of prior RT	(-)	(+)
Pathology (BCC-A)		
Subtype	Nodular, superficial[b]	Aggresive growth pattern[d]
Perineural involvement	(-)	(+)

[a] Any high-risk factor places the patient in the high-risk category.
[b] Low-risk histologic subtypes include nodular, superficial, and other non-aggressive growth patterns such as keratotic, infundibulocystic, and fibroepithelioma of Pinkus.
[c] This area constitutes high risk based on location, independent of size. Narrow excision margins due to anatomic and functional constraints are associated with increased recurrence rates with standard histologic processing. Complete margin assessment such as with Mohs or PDEMA is recommended for optimal tumor clearance and maximal tissue conservation. For tumors <6 mm in size, without other high-risk features, other treatment modalities may be considered if at least 4-mm clinically tumor-free margins can be obtained without significant anatomic or functional distortions.
[d] Having basosquamous, infiltrative, sclerosing/morpheaform, micronodular, and BCC with carcinosarcomatous differentiation features in any portion of the tumor. In some cases, basosquamous tumors may be prognostically similar to squamous cell carcinoma (SCC); clinicopathologic correlation is recommended in these cases to further consider prognostic implication.

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STRATIFICATION TO DETERMINE TREATMENT OPTIONS FOR LOCAL BCC BASED ON RISK FACTORS FOR RECURRENCE[1]

Risk Group	Low Risk	High Risk
Treatment Options	See BCC-2	See BCC-3
H&P		
Location/size	Trunk, extremities <2 cm	Trunk, extremities ≥2 cm
		Cheeks, forehead, scalp, neck, and pretibia (any size)
		Head, neck, hands, feet, pretibia, and anogenital (any size)[3]
Borders	Well-defined	Poorly defined
Primary vs. recurrent	Primary	Recurrent
Immunosuppression	(-)	(+)
Site of prior RT	(-)	(+)
Pathology (See BCC-A)		
Subtype	Nodular, superficial[2]	Aggressive growth pattern[4]
Perineural involvement	(-)	(+)

[1] Any high-risk factor places the patient in the high-risk category.
[2] Low-risk histologic subtypes include nodular, superficial, and other non-agressive growth patterns such as keratotic, infundibulocystic, and fibroepithelioma of Pinkus.
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[4] Having (mixed) infiltrative, micronodular, morpheaform, basosquamous, sclerosing, or carcinosarcomatous differentiation features in any portion of the tumor. In some cases basosquamous tumors may be prognostically similar to SCC; clinicopathologic correlation is recommended in these cases.

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(1)CXR
(2)CT
(3)MRI
由主治醫師判定是否需要做

侷限型#

Low risk☆

- Topical treatment and cryotherapy
- curettage & electrodesiccation
- excision
  - margin positive
    - Moh's surgery
    - Wide excision
    - RT△
  - margin negative
- RT△ ± Cryotherapy if not OP

High risk☆

- wide excision
  - margin positive
    - Moh's surgery
    - RT△
  - margin negative
- Moh's surgery
  - margin positive → RT△
  - margin negative → RT△ if large-nerve involvement
- RT△ if not OP

擴散型+

- Palliative symptom management
- clinical trial or Vismodegib

若仍有殘存病灶但已無法進行手術或放射線治療者，建議Palliative symptom management or clinical trial or Vismodegib or Cryotherapy

Monthly*III
↓
Quarterly*III
↓
6 months*II
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Yearly for life
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§： Image studies is indicated for extensive disease (deep structural involvement such as bone, deep soft tissue, perineural disease)

＋： regional or distal metastatic disease(初始皮膚病灶治療同侷限型）

☆：附件一

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＃： T any, N0, M0(附件三）

基底細胞癌(BCC)

高雄榮民總醫院
臨床診療指引 2023第一版

復發

臨床診斷之可疑病灶，經皮膚切片及病理組織學證實。

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侷限型
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  - margin positive
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若仍有殘存病灶但已無法進行手術或放射線治療者，建議
Palliative symptom management
or clinical trial
or Vismodegib

Monthly*III
↓
Quarterly
Or
Palliative care
（安寧緩和）

Hedgehog pathway inhibitor : Vismodegib/ Sonidegib
Programmed cell death protein 1 (PD-1) inhibitor (cemiplimab)

FOLLOW-UP

- H&P
  - Including complete skin exam every 6–12 mo for the first 5 years, and then at least annually for life[u]
- Consider imaging if clinical exam is insufficient for following the disease[v]
- Patient education:
  - Sun protection
  - Self-examination

RECURRENCE OR ADVANCED DISEASE

Local recurrence → **Follow Primary Treatment pathway for high-risk disease (BCC-3)**

Primary or recurrent nodal metastases →

Multidisciplinary consultation to consider one or more of the following options:
Surgery
or
If surgery is not feasible then RT[j] or systemic therapy[q]
- Hedgehog pathway inhibitor (HHI)
  - Vismodegib
  - Sonidegib (category 2B)
- Programmed cell death protein 1 (PD-1) inhibitor (cemiplimab-rwlc)[w]
- Clinical trial

Distant metastases →

Multidisciplinary consultation to consider:
Systemic therapy[q]
- HHI
  - Vismodegib
- PD-1 inhibitor (cemiplimab-rwlc)[w]

or
RT[j] or surgery for limited metastatic disease[x]
or
Palliation and best supportive care

[j] Principles of Radiation Therapy (BCC-D).
[q] Principles of Systemic Therapy (BCC-E).
[u] Follow-up with a dermatologist is strongly recommended if any of the following criteria are met: past or imminent solid organ, marrow, or stem cell transplant, one or more cutaneous melanomas in the past 5 years, or four or more non-melanoma skin cancers in the past 5 years.
[v] Imaging modality and targeted area should be at the discretion of the treating team based on the suspected extent of disease (ie, local, regional, metastatic). Histologic confirmation is often sufficient to diagnose local recurrence, but MRI can be considered to assess extent of local disease. For nodal or distant metastasis, histologic analysis and/or CT imaging can be used for confirmation and to gauge extent of disease.
[w] Cemiplimab-rwlc is recommended for patients with locally advanced or metastatic basal cell carcinoma (mBCC) previously treated with an HHI or for whom an HHI is not appropriate.
[x] Under highly selective circumstances, in the context of multidisciplinary consultation, resection of limited metastases can be considered.

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癌症藥物停藥準則

- 根據CTCAE (Common Terminology Criteria for Adverse Events, Version 4.0 Published: May 28, 2009 【v4.03: June 14, 2010】)，出 現Grade 3 ~ Grade 4 adverse event。
- 停藥至adverse event回復至Grade 1或Baseline時可再次用藥，但有些 患者必須調整用藥劑量。
- 特定藥物治療下疾病仍持續進展，根據追蹤及評估顯示疾病對此特定藥物治療無效(考慮停止投藥並選擇其他治療方法)。
- 病患要求（ Hospice care或其他因素)。
- 病患死亡。

基底細胞癌(BCC)

附件一：

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STRATIFICATION TO DETERMINE TREATMENT OPTIONS FOR LOCAL BCC BASED ON RISK FACTORS FOR RECURRENCE[1]

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H&P		
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		Cheeks, forehead, scalp, neck, and pretibia (any size)
		Head, neck, hands, feet, pretibia, and anogenital (any size)[3]
Borders	Well-defined	Poorly defined
Primary vs. recurrent	Primary	Recurrent
Immunosuppression	(-)	(+)
Site of prior RT	(-)	(+)
Pathology (See BCC-A)		
Subtype	Nodular, superficial[2]	Aggressive growth pattern[4]
Perineural involvement	(-)	(+)

[1] Any high-risk factor places the patient in the high-risk category.
[2] Low-risk histologic subtypes include nodular, superficial, and other non-agressive growth patterns such as keratotic, infundibulocystic, and fibroepithelioma of Pinkus.
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[4] Having (mixed) infiltrative, micronodular, morpheaform, basosquamous, sclerosing, or carcinosarcomatous differentiation features in any portion of the tumor. In some cases basosquamous tumors may be prognostically similar to SCC; clinicopathologic correlation is recommended in these cases.

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皮膚癌
多專科團隊

基底細胞癌(BCC)

附件二:

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PRINCIPLES OF RADIATION THERAPY

General Principles

- Protracted fractionation is associated with improved cosmetic results and should be utilized for poorly vascularized or cartilaginous areas.
- RT is contraindicated for genetic conditions predisposing to skin cancer (eg, basal cell nevus syndrome) and relatively contraindicated for patients with connective tissue diseases (eg, scleroderma).
- Given higher complication rates, re-irradiation should not be routinely utilized for recurrent disease within a prior radiation field.
- Isotope-based brachytherapy can be an effective treatment for certain sites of disease, particularly on the head and neck.
- There are insufficient long-term efficacy and safety data to support the routine use of electronic surface brachytherapy.

General Treatment Information

Dosing Prescription Regimen

Definitive RT	**Examples of Electron Beam Dose and Fractionation**
Tumor diameter <2 cm	60–64 Gy over 6–7 weeks 50–55 Gy over 3–4 weeks 40 Gy over 2 weeks 30 Gy in 5 fractions over 2–3 weeks
Tumor diameter ≥2 cm, T3/T4, or those with invasion of bone or deep tissue	60–70 Gy over 6–7 weeks 45–55 Gy over 3–4 weeks
Postoperative Adjuvant RT	60–64 Gy over 6–7 weeks 50 Gy over 4 weeks

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基底細胞癌(BCC)

附件三-1:

現在使用AJCC第八版的Skin tumor在頭頸部及生殖部位才需要staging

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Basal and Squamous Cell Skin Cancers

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Basal and Squamous Cell TOC
Discussion

Staging

Table 1

American Joint Committee on Cancer (AJCC)

TNM Staging Classification for Cutaneous Squamous Cell Carcinoma (cSCC) and Other Cutaneous Carcinomas

(7th ed., 2010)

Primary Tumor (T)*

TX Primary tumor cannot be assessed

T0 No evidence of primary tumor

Tis Carcinoma in situ

T1 Tumor 2 cm or less in greatest dimension with less than two high-risk features**

T2 Tumor greater than 2 cm in greatest dimension
or
Tumor any size with two or more high-risk feature

T3 Tumor with invasion of maxilla, mandible, orbit, or temporal bone

T4 Tumor with invasion of skeleton (axial or appendicular) or perineural invasion of skull base

*Excludes cSCC of the eyelid

** High-risk features for the primary tumor (T) staging

Depth/invasion	> 2 mm thickness
	Clark level ≥ IV
	Perineural invasion
Anatomic location	Primary site ear
	Primary site non-hair-bearing lip
Differentiation	Poorly differentiated or undifferentiated

Regional Lymph Nodes (N)

NX Regional lymph nodes cannot be assessed

N0 No regional lymph node metastases

N1 Metastasis in a single ipsilateral lymph node, 3 cm or less in greatest dimension

N2 Metastasis in a single ipsilateral lymph node, more than 3 cm but not more than 6 cm in greatest dimension; or in multiple ipsilateral lymph nodes, none more than 6 cm in greatest dimension; or in bilateral or contralateral lymph nodes, none more than 6 cm in greatest dimension

N2a Metastasis in a single ipsilateral lymph node, more than 3 cm but not more than 6 cm in greatest dimension

N2b Metastasis in multiple ipsilateral lymph nodes, none more than 6 cm in greatest dimension

N2c Metastasis in bilateral or contralateral lymph nodes, none more than 6 cm in greatest dimension

N3 Metastasis in a lymph node, more than 6 cm in greatest dimension

Distant Metastasis (M)

M0 No distant metastases

M1 Distant metastases

Continue

基底細胞癌(BCC)

附件三-2:

Table 1 Continued

American Joint Committee on Cancer (AJCC)

TNM Staging Classification for Cutaneous Squamous Cell Carcinoma (cSCC) and Other Cutaneous Carcinomas (7th ed., 2010)

Anatomic Stage/Prognostic Groups

Stage 0	Tis	N0	M0
Stage I	T1	N0	M0
Stage II	T2	N0	M0
Stage III	T3	N0	M0
	T1	N1	M0
	T2	N1	M0
	T3	N1	M0
Stage IV	T1	N2	M0
	T2	N2	M0
	T3	N2	M0
	T Any	N3	M0
	T4	N Any	M0
	T Any	N Any	M1

Histologic Grade (G)

GX	Grade cannot be assessed
G1	Well differentiated
G2	Moderately differentiated
G3	Poorly differentiated
G4	Undifferentiated

Reference

1. NCCN Clinical Practice Guideline in Oncology, Basal and Squamous Cell Skin Cancers, Version 1.2022.
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