

放療

本資訊主要介紹放療。

所有劃底線的辭彙在本文最後所附的辭彙表中均有說明。辭彙表中亦包括了英語單詞的發音。

許多罹患癌症的人士都接受過放射治療作為治療的一部份。

放療有很多種。在本資訊中，我們會介紹主要的放療類型。請醫生告知您正在接受的是哪一種放療，這樣您就可以閱讀本資訊中的相應部份。

有些人還需要其他的治療方法，例如，化療或者進行手術。醫生會和您商討您的治療方法。我們還有關於這些治療的繁體中文版本。

若您對本資訊有任何疑問，您可以詢問您接受治療所在醫院的醫生及護士。

週一至週五上午 9 時至晚上 8 時，您可以致電麥克米倫癌症援助機構（Macmillan Cancer Support）免費熱線：**0808 808 00 00**。我們有口譯員，所以您可以使用您的語言與我們溝通。當您致電我們時，請以英文告訴我們您所需要的語言（說「釵尼斯」）。

欲參閱更多繁體中文癌症資訊，請瀏覽 macmillan.org.uk/translations

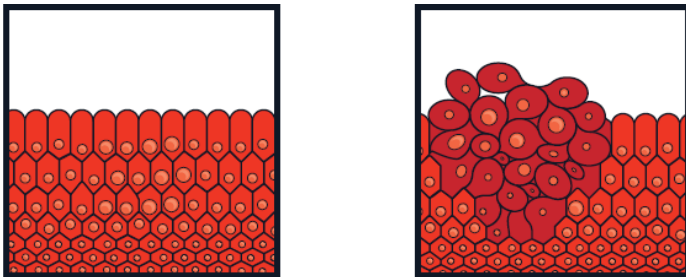
本資訊主要介紹：

- 什麼是癌症？
- 什麼是放療？
- 為什麼要放療？
- 您的放療團隊
- 瞭解您的治療
- 在何處接受放療？
- 規劃您的治療
- 放療類型
- 放療的副作用
- 長期副作用
- 麥克米倫（Macmillan）如何給予協助
- 辭彙表
- 更多繁體中文版資訊
- 參考文獻與致謝

什麼是癌症？

癌症源自於我們身體的細胞。細胞是構成人體器官和組織的微小構建塊。通常，這些細胞以可控的方式分裂並生成新的細胞。這就是我們身體如何成長、癒合和修復的方式。有時，細胞分裂出錯會使細胞變得異常。異常細胞持續不斷地分裂，生成越來越多的異常細胞。這些細胞形成的腫塊叫做腫瘤。

形成腫塊的正常細胞



不是所有的腫塊都是癌症。非癌症型腫塊稱為良性腫瘤，不會擴散到身體的其他部位。癌症型腫塊稱為惡性腫瘤，可以在身體的其他部位生長。

癌細胞有時會脫離原發性癌症，透過血液或淋巴系統傳播到身體的其他部位。癌細胞擴散到身體的其他部位並長成腫瘤，被稱為繼發性癌症。

您不會受別人感染致癌。

什麼是放療？

放療使用強烈的 X 光來破壞癌細胞。它也會損害正常細胞，但這些細胞通常會在治療完成後恢復。

為什麼要放療？

為了治療癌症

放療可用於治療某些類型的癌症。可以單獨進行，也可以在手術之前或之後進行。手術前，它能使腫瘤縮小。手術後，它能殺死殘留的癌細胞。有時化療也會與放療同時進行。

協助緩解一些癌症症狀

當癌症無法治癒時，可以進行放療協助緩解症狀，這稱為姑息性放療。

您的放療團隊

臨床腫瘤科醫生

這是負責利用放療來治療癌症的醫生，他們會幫助規劃您的治療。您會在治療期間與他們會診，以便他們檢查您的狀況。您也可以預約會診。

放射技師

放射技師團隊協助您規劃治療並使用放射治療機。他們還會為您提供有關您可能產生的任何副作用或擔憂的建議。

臨床專科護士

他們是您所患癌症類型的專科護士。您可以與他們討論您的任何疑慮。他們可以在您的治療期間及之後為您提供支援和資訊，也能幫您應對任何的副作用。

瞭解您的治療

在治療前，您的醫生、護士或藥劑師會向您解釋：

- 為什麼需要治療
- 治療頻率為何
- 可能的副作用
- 治療後可能會有的感受

在瞭解進行治療的原因以及您可能會有的感受前，您不應接受任何治療。您會被要求簽署一份表格，表示您同意接受放射治療並瞭解可能的副作用。這稱為同意書。

屆時，最好有一位會說中文和英文的人與您同行。有時候，醫院可以為您提供口譯員。他們通常需要提前安排。因此，如果您需要口譯員，請在約診前先告知醫院。

在何處接受放療？

放療將在醫院進行。您通常會以日間病患的身份進行治療，這意味著您可以在治療後回家，不需要過夜。對於某些類型的放療，您可能需要住院幾天。

如有不適感或者正在同時接受化療，您有可能需要住院。

規劃您的治療

放療的療程是為每個人量身訂造的。這是為確保治療效果良好，及盡量減少所引發的副作用。在您的治療開始之前，您可能需要多次到醫院進行規劃。您的放療團隊會讓您知道之後的流程。

掃描

開始治療前，您需要接受一次或多次掃描。掃描結果能幫助您的醫療團隊確定所需的放療量。同時也有助於他們準確規劃放療的位置。

掃描前，您需要脫去一些衣物，並穿上一件長袍。團隊中的醫療人員也可能會給您某種飲品或進行注射，這有助於從掃描中獲得清晰的圖像。



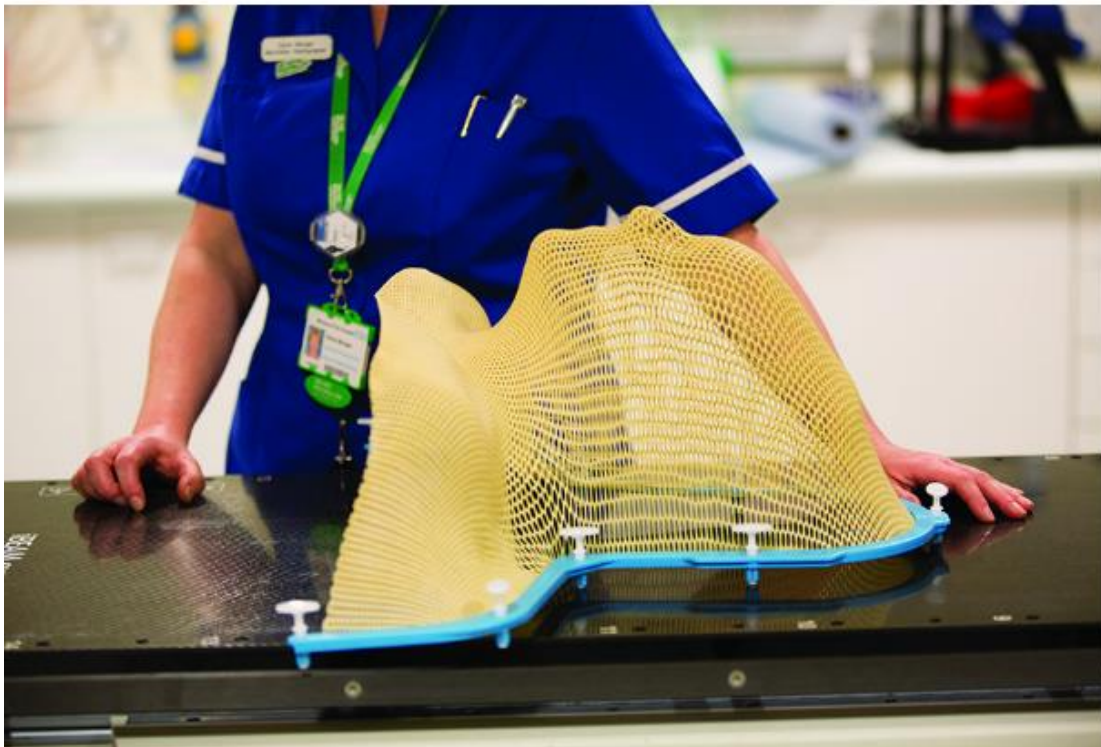
模具和面具

您在進行治療時可能需要使用模具或面具。如果您需要的話，您的放療團隊將可為您製作。模具或面具可協助您保持固定，並且保持在正確的位置。模具是用於腿部、手臂或其他身體部位，而面具是用於頭部或頸部。

模具或面具是以塑料網製成，應該會緊密貼合，但不至於讓您感到不舒服，並且只會短時間佩戴。配戴的時間：

- 當您在規劃治療的時候
- 當您在接受治療的時候

配戴模具或面具時，您可以正常呼吸。



皮膚上的標記

放療團隊的醫療人員可能會在您的皮膚上留下一個小的永久性標記。這是為了標記出放療的確切位置，這個標記的製作方式與紋身相同。如果您對皮膚上的標記有任何憂慮，請告知放射技師。

生育能力

放療會影響您懷孕或讓別人懷孕的能力，很多人認為難以應對。若您擔心這一點，可在治療前與醫生或護士進行溝通。他們會告知您可能會發生哪些情況，並告訴您保護生育能力的方法。與法律顧問或宗教領袖溝通可能也會有所幫助。

避孕

您的醫生可能會建議您在某些治療期間避免懷孕或讓別人懷孕，因為放療會傷害還在成長發育中的嬰兒。放療期間或治療結束後幾個月內要採取避孕措施，這一點至關重要。若您擔心這一點，可以與您的醫生或護士進行溝通。

放療類型

放療具有多種不同類型：

- **體外放療** – 使用放射治療機在體外進行治療。
- **體內放療** – 將某種放射性物質置於體內。體內放療有兩種類型：近距離放射治療和放射性同位素療法。

請醫生告知您正在接受的是哪一種放療，這樣您就可以閱讀本資訊中的相應部份。

體外放療

這是使用放射治療機從身體外部進行放射治療的時候。大多數人每週一至週五接受治療，然後在週末休息，無需接受治療。有些醫院會在週末進行治療，然後於平日休息。

您需要接受的治療量取決於癌症的類型和大小。完成所有療程需要 1 至 7 周的時間。

治療每天僅需幾分鐘，但是若醫院很繁忙，您可能需要等候幾分鐘的時間。您可以在等待期間找一些事情做，比如閱讀或聽音樂。

在您第一次接受治療之前，放療團隊將向您解釋治療過程。他們會要求您脫去一些衣服，並穿上一件長袍。接受治療時感到憂慮是正常的。但是當您熟悉了您的放療團隊和治療流程，治療就會變得輕鬆一些了。

讓您的身體在治療時處於正確位置會花費一些時間。您必須躺著不動。放射技師將調暗燈光，然後他們將在進行治療的時候離開房間。放療不會有疼痛的感覺，而且放射治療機通常不會觸碰到您。

放射技師將在隔壁房間透過窗戶或螢幕觀察您。其他人無法看到您。如有任何問題，您可以舉手或者按響警鈴讓他們知道。

機器會圍著您的身體移動，從不同角度進行治療。一旦治療結束，放射科醫生會回到房間，協助您關掉機器。

該治療不會讓您的身體產生輻射。因此在治療之後，您和其他人（包括兒童）在一起是安全的。

體外放療



近距離放射治療

這是一種內部放射治療。放射性植入物將被放入您體內靠近癌症的位置。放入時，您可能會在全身麻醉的情況下睡著。或者您可能會被注射止痛藥。

在您住院接受治療期間，您通常獨自在治療室中接受治療並會在該處停留一段時間，這是為了保護其他人不被治療影響。如果您對此有任何憂慮，請告知您的團隊，以便他們提供協助。他們將向您解釋您的治療所需要的時間。

一旦植入物從您的身體中移除，您就不再有輻射。

對於某些類型的近距離放射治療而言，植入物是不會被移除的。與大多數其他人在一起是安全的。您的團隊可能會要求您避免與兒童或孕婦密切接觸。他們會告訴您要維持這種情況所需要的時間。他們會向您解釋這個情況，以及您需要知道任何事情。

您的團隊將為您提供有關治療的印刷資訊單。我們建議您務必隨身攜帶這份資訊單。

近距離放射治療通常用於治療前列腺癌、子宮頸癌、外陰癌、以及子宮癌。它也可用於治療其他類型的癌症。可以單獨進行，也可以配合體外放射治療進行。

放射性同位素療法

這是一種內部放射治療。您會攝入一種放射性液體：

- 以飲料或膠囊形式口服
- 注射入靜脈。

癌細胞比正常細胞更會吸收液體，如此一來便可以破壞癌細胞。

治療後，您的體液將有輕微的輻射，這將逐漸恢復正常。您的團隊將為您提供有關如廁和安全清理任何溢出物的說明。他們可能會要求您避免與兒童或孕婦密切接觸。他們會告訴您要維持這種情況所需要的時間。

如果他們告知您必須住院，您可能被要求維持留在您的房間裡。如果您對此有任何憂慮，請告知您的團隊，以便他們提供協助。他們將向您解釋您的治療所需要的時間。

放射性同位素療法通常用於治療甲狀腺癌，它也可用於治療已擴散到骨骼的某些癌症類型。

放療的副作用

放療對每個人的影響各異。有些病患的副作用很輕微，但有些卻很嚴重。我們將針對最常見的副作用進行說明。您不大可能出現所有這些副作用。

在治療開始之前，您的放療團隊會告知您可能遭受的副作用。您可以向他們詢問您的任何疑問。如果您在治療期間出現任何副作用，請告知您的團隊。他們能為您提供有幫助的建議和藥物。如果您在家時感到不適，請致電醫院。

疲勞

治療期間和治療結束後的數星期或數月內，您可能會感到疲憊不堪。每天往返醫院通常會讓疲倦的感覺更加惡化。如果您感到疲憊，請好好休息。做好每一天的規劃，讓自己不會有太多活動。

若可以的話，盡量每天進行適當的運動。短程散步會讓您更為精力充沛。

感覺不適

治療會讓您感覺不適，有時會噁心嘔吐。對肚子（腹部）附近進行治療時出現這種情況很正常。您的治療團隊可以提供藥物來緩解您的不適。

飲食問題

有時候，您可能會不想吃東西。若發生這種情況，請試著有規律地進食些小點心，而非大吃大喝。如果您在進食的時候遇到問題，請務必告知您的放療團隊。他們可以為您提供建議。如果您的飲食中需要額外的能量或蛋白質，您可以服用營養補給品。

皮膚護理

接受治療的皮膚部位可能會：

- 泛紅
- 變暗
- 疼痛或發癢。

如果您的皮膚出現這樣的變化，請立即告知您的放療團隊。他們可以為您提供建議和治療。

以下是一些建議，希望對您有所幫助：

- 穿著以天然纖維製成的寬鬆衣服，如棉製品
- 以溫和無香料的肥皂和水輕輕洗淨您的皮膚，然後輕輕拍乾
- 不要抹擦皮膚
- 不要用熱毛巾敷臉刮鬍
- 不要使用脫毛膏或類似產品，包括蠟在內
- 詢問您的放療團隊是否可以在皮膚上使用保濕劑或體香劑
- 保護皮膚避免陽光照射。

掉髮

只有在接受治療部位的毛髮才會脫落。若治療的是頭部，則頭髮可能脫落；若治療的是胸部，則腋下毛髮可能脫落。有些人對掉髮感到懊惱。若您擔心這一點，可以與醫生或護士進行溝通，他們可能提供協助。

血液變化

有時候，放療會降低血液中血細胞的數量。您的放療團隊可能會為您安排驗血，以檢查您的血細胞數量。如果某些類型的血細胞水平過低，有些人需要藥物或有時需要輸血。

如果您在不明原因的情況下出現瘀傷或出血，請務必告知您的團隊。其中包括：

- 流鼻血
- 牙齦出血
- 皮膚上出現看起來像皮疹的微小紅色或紫色斑點。

如果出現以下情況，您也應該立刻聯繫您的放療團隊：

- 您的體溫超過 37.5°C (99.5°F)
- 您突然感到不適，即使體溫正常
- 出現感染症狀 — 這可能包括感覺到發抖、喉嚨痛、咳嗽、腹瀉或頻尿。

腹瀉

在肚子（腹部）或骨盆附近進行治療，出現稀便（大便）或腹瀉的情況是正常現象，您上廁所的次數可能要比正常情況更頻繁，並可能會讓您覺得疲勞虛弱，多喝流食很重要。若腹瀉或肚子（腹部）感到疼痛，請告知醫務人員，他們會提供您藥片來緩解症狀。

排尿問題

對膀胱附近進行治療，可能會讓您排尿（小便）比正常情況更頻繁。多喝流食可能會有所幫助。如果遇到以下情況，請立即告訴醫生或護士：

- 排尿時感到疼痛
- 需要排尿的時候無法憋住
- 尿液裡有血。

前列腺癌或陰莖癌的放射治療有時會使尿液難以通過。如果發生這種情況，您可能需要將一根細管放入膀胱以便協助您排出尿液。醫院的護士會告訴您如何照顧管子，護士也可到府為您提供協助。

口瘡

若治療的是頭部或頸部，您可能出現口腔疼痛的問題，這可能使您吞嚥困難。治療期間，照顧好自己的口腔至關重要。您的團隊會告訴您如何做。請避免以下事情，這會有所幫助：

- 抽煙
- 飲用酒精類飲料或辛辣食物
- 食用滾燙的食物。

若覺得口腔疼痛或出現口腔潰瘍，請告知醫生或護士，這一點至關重要。如有需要，他們會給您漱口水和止痛藥來緩解症狀。若吞嚥困難，醫生會給您開藥幫助緩解。

長期副作用

大部份的副作用持續時間不長，有些可能在治療結束後只持續幾週，而有時副作用的持續時間可能更長。偶爾會存在副作用伴隨您一生的情況。在您接受治療之前，醫生會與您討論這個問題。您必須瞭解有些副作用可能永久存在，這點至關重要。

麥克米倫 (Macmillan) 如何給予協助

麥克米倫 (Macmillan) 致力於協助您和您的家人。您可透過下列方式獲得援助：

- **麥克米倫 (Macmillan) 援助熱線 (0808 808 00 00)**。我們有口譯員，所以您可以使用您的語言與我們溝通。您只需用英語告訴我們您希望使用何種語言即可。我們可以回答有關醫療的問題、提供有關資金援助的資訊或與您討論您的感受。我們的電話接聽時間是週一至週五上午 9 時至晚上 8 時。
- **麥克米倫 (Macmillan) 網站 (macmillan.org.uk)**。我們的網站提供許多有關癌症和癌症病患生活的英文資訊。欲瞭解其他語言的更多資訊，請瀏覽 macmillan.org.uk/translations
- **資訊與支援服務**。您可透過資訊與支援服務中心向癌症援助專家諮詢並獲得書面資訊。瀏覽 macmillan.org.uk/informationcentres 尋找離您最近的諮詢中心或致電我們。您的醫院可能設有資訊中心。
- **本地支援團體** – 您可以在支援團體中與其他受癌症影響的人交流。瀏覽 macmillan.org.uk/supportgroups 尋找離您最近的當地支援團體或致電我們。
- **麥克米倫 (Macmillan) 網路社群** – 您亦可以前往 macmillan.org.uk/community 與其他受癌症影響的人交流。

辭彙表

詞語 (繁體中文)	英文	英文發音 (英文單詞的 譯音)	定義
良性腫瘤	Benign	別乃能	體內的一腫塊，並非癌症，不會擴散到身體的其他部位。
細胞	Cells	瑟爾思	構成我們身體器官和組織的微小結構單元。
宮頸	Cervix	色威克斯	宮頸是子宮底部的開口。位於女性身體內陰道的頂部。
化療	Chemotherapy	基模特拉皮	使用藥物殺死癌細胞的癌症治療方法。
避孕	Contraception	空差瑟普損	避免懷孕的藥物或措施。
治癒	Cured	科遇得	當體內沒有癌細胞時。
腹瀉	Diarrhoea	戴阿瑞亞	大便較軟或呈水狀。您可能需要比平時更頻繁或非常急需如廁。也可能伴有腹痛。
淋巴系統	Lymphatic system	淋法提克·斯 思騰	整個身體的血管和腺體網路，幫助對抗感染。
惡性腫瘤	Malignant	瑪賴能特	身體的一個腫塊，是癌症，會擴散到身體的各個部位。
前列腺	Prostate	普若斯泰特	前列腺是男性身體內的一個小腺體，靠近膀胱的位置。
放射性	Radioactive	瑞迪歐阿克提夫	若某物是放射性的，則表示它會釋放放射物。
掃描	Scan	斯卡恩	醫生對身體內部的進行拍照。
副作用	Side effects	篩的·依費特司	癌症治療中的不良影響，如掉髮、疼痛、噁心或疲勞。治療結束後，大多數副作用會消失。
手術治療	Surgery	瑟借瑞	進行手術。
腫瘤	Tumour	徒摩	腫瘤是以異常方式生長的細胞群。異常細胞不斷繁殖並形成腫塊。
陰道	Vagina	娃載娜	陰道是女性身體內的一個小通道。陰道的入口位於兩腿之間，陰道的頂部是宮頸，然後

			是子宮。
子宮	Womb	烏噠哋	子宮是女性身體內部位於下腹部的一個圓形器官。女性懷孕後，子宮就是嬰兒成長的地方。

更多繁體中文版資訊

我們提供更多有關下列主題的繁體中文資訊：

癌症類型	應對癌症
<ul style="list-style-type: none">• 乳癌• 大腸癌• 肺癌• 前列腺癌	<ul style="list-style-type: none">• 若您被診斷患有癌症 – 快速指南• 申請福利救濟• 飲食問題與癌症• 生命的終點• 經濟援助 – 福利救濟金• 經濟援助 – 財務協助• 健康飲食• 疲憊（疲勞）與癌症• 癌症治療的副作用• 您可以做些什麼來幫助自己
治療	
<ul style="list-style-type: none">• 化療• 放療• 手術治療	

欲查看該資訊，請前往 macmillan.org.uk/translations

以中文與我們溝通

您可以撥打麥克米倫（Macmillan）免費電話 **0808 808 00 00** 透過口譯員以中文與我們交談。您可以同我們討論您的憂慮和醫療問題。當您致電我們時，只需用英語說出「中文」即可（請說出「釵尼斯」）。

我們的辦公時間是週一至週五上午 9 時至晚上 8 時。

參考文獻與致謝

本資訊由麥克米倫癌症援助機構（Macmillan Cancer Support）癌症資訊開發團隊編寫和編輯。並由翻譯公司提供繁體中文的翻譯版本。

本資訊以麥克米倫（Macmillan）宣傳冊**瞭解放射治療**的內容編寫。我們可以將宣傳冊發送給您，但完整手冊只有英語版本。

本資訊已由相關專家審閱，並得到顧問醫療腫瘤學家和麥克米倫（Macmillan）首席醫療編輯，即我們的醫學編輯 Tim Iveson 博士的批准。

同時感謝審閱本資訊的癌症患者。

我們所有的資訊都依據可獲得的最佳證據。關於我們所用資源的更多資訊，請透過 cancerinformationteam@macmillan.org.uk 聯絡我們。

MAC12465_Traditional Chinese



內容審閱日期：2018 年 12 月

預計下次審閱日期：2021 年

我們盡最大努力確保我們提供的資訊準確無誤，但其並不能反映最新的醫學研究情況，因為這是不斷變化的。如果您擔心您的健康狀況，則應諮詢您的醫生。麥克米倫（Macmillan）對由於此資訊或第三方資訊（如我們所連結到的網站上的資訊）的任何不準確所造成的任何損失或損害不承擔任何責任。

我們希望這些資訊對您有用。如果您有任何問題，我們可透過您的語言在電話中提供資訊和支援。我們的服務是免費的。您只需致電：**0808 808 00 00**（週一至週五，上午 9 時至晚上 8 時），並以英語說出您選定的語言。

© 2018 麥克米倫癌症援助機構（Macmillan Cancer Support）。於英格蘭和威爾士 (261017)、蘇格蘭 (SC039907) 和馬恩島 (604) 註冊的慈善機構。註冊登記處：89 Albert Embankment, London SE1 7UQ。

MAC12465_Traditional Chinese

Radiotherapy

This information is about radiotherapy.

Any words that are underlined are explained in the word list at the end. The word list also includes the pronunciation of the words in English.

Many people with cancer will have radiotherapy as part of their treatment.

There are different types of radiotherapy. We explain the main types in this information. Ask your doctor to explain which type of radiotherapy you are having so you can read the right parts of this information.

Some people will also need other treatments, such as chemotherapy or surgery. The doctors at the hospital will talk to you about your treatment. We also have information in [language] about these treatments.

If you have any questions about this information, ask your doctor or nurse at the hospital where you are having treatment.

You can also call Macmillan Cancer Support on freephone **0808 808 00 00**, Monday to Friday, 9am to 8pm. We have interpreters, so you can speak to us in your own language. When you call us, please tell us in English which language you need (say "xxxxx").

There is more cancer information in [language] at **macmillan.org.uk/translations**

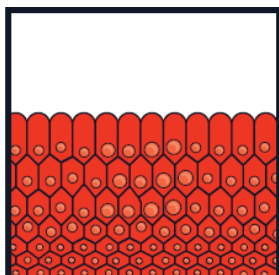
This information is about:

- What is cancer?
- What is radiotherapy?
- Why is radiotherapy given?
- Your radiotherapy team
- Understanding your treatment
- Where is radiotherapy given?
- Planning your treatment
- Types of radiotherapy
- Side effects of radiotherapy
- Long-term side effects
- How Macmillan can help
- Word list
- More information in [language]
- References and thanks

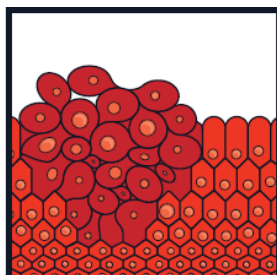
What is cancer?

Cancer starts in our body's cells. Cells are the tiny building blocks that make up the organs and tissues of our body. Usually, these cells split to make new cells in a controlled way. This is how our bodies grow, heal and repair. Sometimes, this goes wrong and the cell becomes abnormal. The abnormal cell keeps splitting and making more and more abnormal cells. These cells form a lump called a tumour.

Normal cells



Cells forming a tumour



Not all lumps are cancer. A lump that is not cancer is called benign. It cannot spread to anywhere else in the body. A lump that is cancer is called malignant. It can grow into other areas of the body.

Cancer cells sometimes break away from the first cancer and travel through the blood or lymphatic system to other parts of the body. Cancer cells that spread and develop into a tumour somewhere else in the body are called a secondary cancer.

You cannot catch cancer from someone else.

What is radiotherapy?

Radiotherapy uses strong x-rays to destroy cancer cells. It can damage normal cells too but they usually recover after treatment finishes.

Why is radiotherapy given?

To cure the cancer

Radiotherapy can be given to cure some types of cancer. It may be given on its own. Or it may be given before or after surgery. Before surgery it may make the tumour smaller. After surgery, it can help kill any cancer cells left behind. Sometimes chemotherapy is given at the same time as radiotherapy.

To help with cancer symptoms

When cancer cannot be cured, radiotherapy may be given to help with symptoms. This is called palliative radiotherapy.

Your radiotherapy team

Clinical oncologist

This is a doctor who treats cancer with radiotherapy. They help plan your treatment. You may see them during your treatment so they can check how you are feeling. You can also ask to see them between appointments.

Radiographers

The team of radiographers help plan your treatments and work the radiotherapy machines. They also give you advice about any side effects or worries that you may have.

Clinical nurse specialists

They are nurses who are experts in the type of cancer you have. You can talk to them about any concerns you have. They can give you support and information during and after your treatment. They can also help you manage any side effects.

Understanding your treatment

Before you have treatment, your doctor, nurse or pharmacist will explain:

- why you need it
- how often you will have it
- the possible side effects
- how you may feel after the treatment.

No treatment should be given unless you understand why you are having it and how you may feel. You will be asked to sign a form to show that you agree to the treatment and understand its possible side effects. This is called a consent form.

It is a good idea to take someone with you who speaks [language] and English. Sometimes the hospital can provide an interpreter for you. They usually need to arrange this in advance. So if you need an interpreter, tell the hospital before the appointment.

Where is radiotherapy given?

Radiotherapy is given in hospital. You usually have your treatment as a day patient. This means you can go home after the treatment and you don't need to stay overnight. With some types of radiotherapy, you may need to stay in hospital for a few days.

If you are unwell or also having chemotherapy, you may need to stay in hospital.

Planning your treatment

Radiotherapy is planned carefully for each person. This is to make sure the treatment works well and causes as few side effects as possible. You may need to visit the hospital a few times for planning before your treatment can start. Your radiotherapy team will tell you what to expect.

Scans

You will need to have one or more scan before you start treatment. This helps your team decide how much radiotherapy you need. It also helps them plan exactly where to give the radiotherapy.

Before a scan, you may be asked to remove some clothing and put on a gown. Someone from the team may also give you a drink or injection. This helps get a clear picture from the scan.



Moulds and masks

You may need a mould or mask for your treatment. If you need one, your radiotherapy team will make it for you. A mould or mask helps you stay still and in the correct position. Moulds are for a leg, arm, or other body part. Masks are for the head or neck.

A mould or mask is made of a plastic mesh. It fits tightly but it should not be uncomfortable. You only wear it for short periods of time. You would wear it

- when your treatment is being planned
- when you have your treatment.

You can breathe normally while you are wearing a mould or mask.



Marks on the skin

Someone from your radiotherapy team may make small, permanent marks on your skin. The marks show exactly where to give the radiotherapy. The marks are made in the same way as a tattoo. Tell the radiographer if you have any worries about having marks on your skin.

Fertility

Radiotherapy can affect your ability to get pregnant or make someone pregnant. Many people find this difficult to deal with. If you are worried about this, talk to your doctor or nurse before treatment starts. They can tell you what to expect and about ways to protect your fertility. Speaking to a counsellor or religious leader may also be helpful.

Contraception

Your doctor may advise you not to become pregnant or make someone pregnant during some treatments. This is because radiotherapy may harm a developing baby. It is important to use contraception during and for a few months after radiotherapy. You can talk to your doctor or nurse if you are worried about this.

Types of radiotherapy

There are different types of radiotherapy:

- **External radiotherapy** – given from outside the body by a radiotherapy machine.
- **Internal radiotherapy** – when a radioactive material is put into your body. There are two types of internal radiotherapy: brachytherapy and radioisotope therapy.

Ask your doctor to explain which type you are having, so you can read the right parts of this information.

External beam radiotherapy

This is when radiotherapy is given from outside the body using a radiotherapy machine. Most people have treatment each day from Monday to Friday. Then they have a rest with no treatment at the weekend. Some hospitals give treatment at the weekends too, with a rest during the week instead.

How many treatments you have will depend on the type and size of the cancer. It can take from one to seven weeks to have all the treatment you need.

Treatment only takes a few minutes each day but you may need to wait for your treatment if the hospital is busy. It can help to do something while you wait, like read or listen to music.

Before your first treatment, the radiotherapy team will explain what will happen. They may ask you to take off some clothes and wear a gown. It is normal to feel worried about having treatment. But it usually gets easier as you get to know your radiotherapy team and what happens.

It may take a little while to get you in the correct position for treatment. You will need to lie very still. The radiographers will dim the lights. Then they will leave the room while the treatment happens. Having radiotherapy does not hurt and the radiotherapy machine does not usually touch you.

The radiographers will watch you from the next room, either through a window or on a screen. No one else will be able to see you. If you have any problems you can raise your hand or ring an alarm to let them know.

The machine may move around your body to give the treatment from different directions. Once the treatment is over, the radiographers will come back into the room and help you down from the machine.

This treatment will not make you radioactive. It is safe for you to be with other people, including children, after your treatment.

External beam radiotherapy



Brachytherapy

This is a type of internal radiotherapy. A radioactive implant is placed in your body near the cancer. You may be asleep under a general anaesthetic when it is put in. Or you may have painkiller injections.

During your treatment you stay in hospital. You are usually alone in the treatment room for some time while the radiotherapy is given. This is to protect others from the treatment. Tell your team if you are worried about this so they can help. They will explain how long your treatment will take.

As soon as the implant is removed from your body, you are not radioactive.

For some types of brachytherapy, the implants are not removed. It is safe for you to be around most other people. Your team may ask you to avoid close contact with children or pregnant women. They will tell you how long you need to do this. They will explain this and anything else you need to know.

Your team will give you printed information about your treatment. It is important to carry this with you all the time.

Brachytherapy is often used to treat cancer of the prostate, cervix, vulva and womb. It may also be used to treat other types of cancer. It can be used on its own or with external beam radiotherapy.

Radioisotope therapy

This is a type of internal radiotherapy. You have a radioactive liquid:

- by mouth as a drink or capsules
- as an injection into a vein.

Cancer cells take in the liquid more than normal cells do. This destroys the cancer cells.

After treatment your body fluids are slightly radioactive. This will gradually return to normal. Your team will give you instructions about using the toilet and cleaning up any spillages safely. They may ask you to avoid close contact with children or pregnant women. They will tell you how long you need to do this.

If they tell you that you must stay in hospital, you may be asked to stay alone in your room all the time. Tell your team if you are worried about this so they can help. They will explain how long your treatment will take.

Radioisotope therapy is often used to treat thyroid cancer. It may also be used to treat some types of cancer that have spread to the bone.

Side effects of radiotherapy

Radiotherapy affects everyone differently. Some people have very few side effects while others have more. We describe the most common side effects here. It is unlikely that you will get all of these.

Before your treatment, your radiotherapy team will talk to you about which side effects you may get. Ask them any questions you may have. Tell your team if you have any side effects during treatment. They can give you advice or medicines to help. If you feel unwell when you are at home, call the hospital.

Tiredness

You may feel very tired during treatment and for weeks or months after it finishes. Travelling to hospital each day can make tiredness worse. If you are tired, allow yourself time to rest. Plan your day so that you don't do too much.

It is important to do some exercise each day if you can. A short walk may give you more energy.

Feeling sick

Treatment can make you feel sick, and sometimes be sick. This is more common if you have treatment near the tummy (abdomen). Your treatment team can give you a medicine to stop you feeling sick.

Eating and drinking

Sometimes you may not want to eat. If this happens, try having regular small snacks rather than large meals. If you are having problems with eating it is important to tell your radiotherapy team. They will give you advice. If you need extra energy or protein in your diet, you can take food supplements.

Looking after your skin

The skin in the area that is treated may get:

- red
- darker
- sore or itchy.

If you have skin changes like these, tell your radiotherapy team straight away. They can give you advice and treatments.

Here are some tips that may help:

- wear loose-fitting clothes made from natural fibres, such as cotton
- wash your skin gently with mild, unperfumed soap and water and gently pat it dry
- do not rub the skin
- do not wet shave
- do not use hair-removing creams or products, including wax
- ask your radiotherapy team if you can use moisturisers or deodorants on the skin
- protect the skin from the sun.

Hair loss

You only lose hair from the area of your body where you have treatment. If you have treatment to your head, you may lose some hair from your head. If you have treatment to your breast, the hair under your arm might fall out. Some people feel upset about losing hair. If you are worried about it, talking to your doctor or nurse can help.

Changes in your blood

Sometimes radiotherapy can lower the number of blood cells in your blood. Your radiotherapy team may arrange blood tests for you to check the number of blood cells you have. Some people need medicine or sometimes a blood transfusion if the level of certain types of blood cells is too low.

Always tell your team if you have bruising or bleeding and you do not know why. This includes:

- nosebleeds
- bleeding gums
- tiny red or purple spots on the skin that may look like a rash.

You should also contact your radiotherapy team straight away if:

- your temperature goes over 37.5°C (99.5°F)
- you suddenly feel unwell, even with a normal temperature
- you have symptoms of an infection – this can include feeling shaky, a sore throat, a cough, diarrhoea or needing to pass urine a lot.

Diarrhoea

It is common to have loose stools (poo) or diarrhoea if you have treatment near your tummy (abdomen) or pelvis. You may need to use the toilet more often than usual. This can make you feel tired and weak. It is important to drink plenty of fluids. Tell the staff at the hospital if you have diarrhoea or tummy (abdominal) pain. They can give you tablets to help.

Problems with passing urine

Treatment near the bladder can make you pass urine (pee) more often than usual. Drinking more fluids may help. Tell the doctor or nurse straight away if

- it hurts when you pass urine
- you cannot wait when you need to pass urine
- you have blood in your urine.

Radiotherapy for prostate or penis cancer sometimes makes it difficult to pass urine. If this happens, you may need to have a thin tube put into your bladder to drain the urine. The nurses at the hospital will show you how to look after the tube. A nurse can also visit you at home to help you.

Sore mouth

If you have treatment to your head or neck, your mouth may get sore. This may make swallowing difficult. It is important to look after your mouth during treatment. Your team will show you how to do this. It can help to avoid:

- smoking
- drinking alcohol spicy food
- very hot food.

It is important to tell the doctor or nurse if your mouth feels sore or you have mouth ulcers. They can give you mouthwashes and painkillers to help. If it becomes difficult to swallow your doctor can prescribe medicines to help.

Long-term side effects

Most side effects only last for a short time. Some may last for a few weeks after your treatment has finished. Sometimes, side effects can last longer than this. Occasionally, they can last for the rest of your life. Your doctor will talk to you about this before you have your treatment. It is important that you understand that some side effects may be permanent.

How Macmillan can help you

Macmillan is here to help you and your family. You can get support from:

- **The Macmillan Support Line (0808 808 00 00).** We have interpreters, so you can speak to us in your language. Just tell us, in English, the language you want to use. We can answer medical questions, give you information about financial support, or talk to you about your feelings. The phone line is open Monday to Friday, 9am to 8pm.
- **The Macmillan website (macmillan.org.uk).** Our site has lots of English information about cancer and living with cancer. There is more information in other languages at macmillan.org.uk/translations
- **Information and support services.** At an information and support service, you can talk to a cancer support specialist and get written information. Find your nearest centre at macmillan.org.uk/informationcentres or call us. Your hospital might have a centre.
- **Local support groups** – At a support group you can talk to other people affected by cancer. Find a group near you at macmillan.org.uk/supportgroups or call us.
- **Macmillan Online Community** – You can also talk to other people affected by cancer online at macmillan.org.uk/community

Word list

Word (target language)	In English	How to say in English (transliteration of English word)	Meaning
	Benign		A lump in the body that is not cancer and cannot spread to anywhere else in the body.
	Cells		The tiny building blocks that make up the organs and tissues of our body.
	Cervix		The cervix is the opening at the bottom of your <u>womb</u> . It is inside a woman's body at the top of the <u>vagina</u> .
	Chemotherapy		A cancer treatment that uses drugs to kill cancer cells.
	Contraception		Drugs or devices that prevent pregnancy.
	Cured		When there are no cancer cells left in the body.
	Diarrhoea		When you have soft or watery poo. You might need the toilet more than usual or very urgently. You may also have tummy pain.
	Lymphatic system		A network of vessels and glands throughout the body that helps to fight infection.
	Malignant		A lump in the body that is cancer and can spread around the body.
	Prostate		The prostate is a small gland inside a man's body. It is near the bladder.
	Radioactive		If something is radioactive, it means it releases radiation.

	Scan		When doctors take a picture of the inside of your body.
	Side effects		Unwanted effects of cancer treatment. For example, hair loss, feeling sick or tiredness. Most side effects go away after treatment finishes.
	Surgery		Having an operation.
	Tumour		A tumour is a group of cells that are growing in an abnormal way. The abnormal cells keep multiplying and form a lump.
	Vagina		The vagina is a passageway inside a woman's body. The entrance to the vagina is between your legs. At the top of the vagina is the <u>cervix</u> , which then leads to the <u>womb</u> .
	Womb		The womb is a round organ inside a woman's body in the lower tummy area. It is where a baby grows if you are pregnant.

More information in [language]

We have information in [language] about these topics:

<p>Types of cancer</p> <ul style="list-style-type: none">• Breast cancer• Large bowel cancer• Lung cancer• Prostate cancer <p>Treatments</p> <ul style="list-style-type: none">• Chemotherapy• Radiotherapy• Surgery	<p>Coping with cancer</p> <ul style="list-style-type: none">• If you're diagnosed with cancer – A quick guide• Claiming benefits• Eating problems and cancer• End of life• Financial support – benefits• Financial support – help with costs• Healthy eating• Tiredness (fatigue) and cancer• Side effects of cancer treatment• What you can do to help yourself
---	--

To see this information, go to macmillan.org.uk/translations

Speak to us in [language]

You can call Macmillan free on **0808 808 00 00** and speak to us in [language] through an interpreter. You can talk to us about your worries and medical questions. Just say [language] in English when you call (say “xxxxx”).

We are open Monday to Friday, 9am to 8pm.

References and thanks

This information has been written and edited by Macmillan Cancer Support's Cancer Information Development team. It has been translated into [language] by a translation company.

The information included is based on the Macmillan booklet **Understanding radiotherapy**. We can send you a copy, but the full booklet is only available in English.

This information has been reviewed by relevant experts and approved by our Chief Medical Editor, Dr Tim Iveson, Consultant Medical Oncologist and Macmillan Chief Medical Editor.

Thanks also to the people affected by cancer who reviewed this information.

All our information is based on the best evidence available. For more information about the sources we use, please contact us at **cancerinformationteam@macmillan.org.uk**

MAC12465_Language



Content reviewed: December 2018

Next planned review: 2021

We make every effort to ensure that the information we provide is accurate but it should not be relied upon to reflect the current state of medical research, which is constantly changing. If you are concerned about your health, you should consult your doctor. Macmillan cannot accept liability for any loss or damage resulting from any inaccuracy in this information or third-party information such as information on websites to which we link.

© Macmillan Cancer Support 2018. Registered charity in England and Wales (261017), Scotland (SC039907) and the Isle of Man (604). Registered office 89 Albert Embankment, London SE1 7UQ.

MAC12465_Language